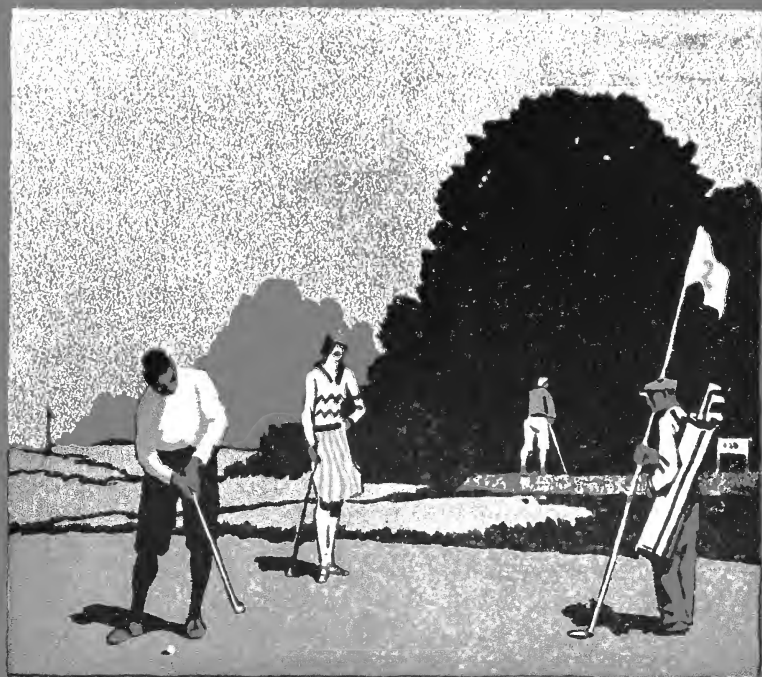


## **Historic, Archive Document**

**Do not assume content reflects current scientific knowledge, policies, or practices.**





# *Seeds of Success*

"Everything for the Golf Course"

1930

**J. OLIVER JOHNSON INC.**  
MORGAN HURON SUPERIOR STREETS  
CHICAGO, ILLINOIS

## To the Trade

**T**HIS edition of our General Catalog No. 10 cancels all previous issues. Owing to fluctuations in factory costs and changes of seed market, bulletins will be issued from time to time to promptly bring before the trade new goods of merit and also for the purpose of giving immediate advice of price changes.



## Everything for the Golf Course

IN PREPARING this booklet of golf course accessories and supplies, we have endeavored to deal with the various subjects in an advisory as well as a merchandising capacity. Service and suggestion to golf club officials in connection with the upkeep of their courses are available here in the fullest measure. We pride ourselves on being able not only to supply you with the proper grass seeds, fertilizers and equipment, but to advise you correctly concerning those best suited for your particular needs. If necessary, our Service Department will send a personal representative to aid in solving your problems.

To this policy of thorough co-operation, we attribute our continued growth throughout a quarter of a century of such service. The arrival of the 1930 Spring Seeding Season finds us, as usual, ready to ship the necessary grass seeds, fertilizers and equipment for your course direct from stock. A larger selection than ever before is offered, and if it should happen that items not listed are needed, we shall be glad to render our usual assistance in obtaining them.

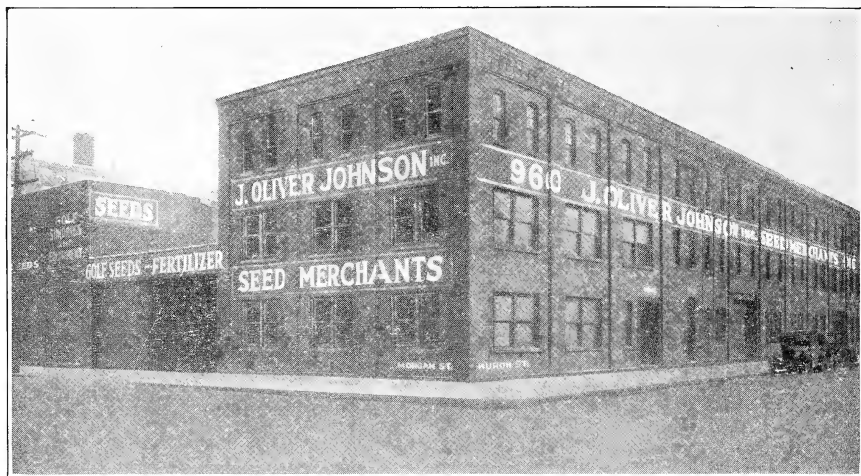
**J. OLIVER JOHNSON, INC.**

*Wholesale Seed Merchants*

Morgan-Huron-Superior Sts.

CHICAGO, ILL.

Local and Long Distance 'Phone: Monroe 6580



## Demonstrations for Golf Club Officials at Our Show Rooms

FOR some years we have maintained very complete show rooms and demonstrating rooms in our main Chicago plant, which is illustrated above. Local or visiting Chairmen of Greens and Greens-keepers are invited to call at these show rooms whenever they wish and examine the complete line of golf course construction and maintenance equipment.

Golf club officials have found this service exceedingly valuable. As a rule, considerable time is spent studying catalog specifications—often without a final decision being made. A personal inspection of the materials and equipment not only will make the decision and the choice much easier but will result in final satisfaction.

During your visit we shall be glad to conduct you, if you desire, through the

warehouse, where you will see thousands of pounds of both domestic and imported varieties of grass seeds. Methods of handling and cleaning these will gladly be explained.

### How to Reach Our Main Plant

**By surface cars:** From loop take Milwaukee Ave. car to Morgan Street; or north and south-bound cars, transfer at Chicago Avenue, get off at Morgan, then one block south.

**By autos:** New Ogden Avenue Boulevard from north or south to Chicago Avenue, then east to Morgan.

Away from loop traffic—ample parking space.

From State and Madison Streets we are 1000 west and 700 north.

## Grass Culture

MANY conditions, differing in various localities, must be taken into consideration in the development of a satisfactory turf. Hence, it is almost impossible to give blanket advice covering each case as a whole. The general information we give, however, will be found to apply generally. Such factors as character

of the soil, fertilization required, regulation of moisture, weed growth and the use of quality seeds, obtain at all times. Proved and practical methods should always be followed, as satisfactory results never can be accomplished from slipshod work.

There is one rule which always applies

*Don't fail to visit our show-room*

in the purchase of seeds: It never pays to select any but those of known quality. When you come to consider the labor, cost of planting and the additional expense of re-planting and extra attention if first results are not satisfactory, it will be found that the very best grade of seeds represents the most economical investment.

Our Service Department is at your command at all times to give personal assistance in solving your problems and to assist in the selection of proper seeds. If you wish, our representative will render written report of personal inspection. This service is gratis, and will be found a valuable source of accurate information for each individual case.

The producing of dense-growth putting-greens and fairways is not a matter of chance, but of close supervision of soil mixtures involving ideal capillary action, thus promoting resiliency of the turf, proper use of fertilizers, judicious use of tiling for sufficient drainage and immediate elimination of factors tending to later cause embarrassing delays.

In the selection of a site, such features as rolling land, hillsides and flat fields all contain different soil analysis. The loam conditions of each can be corrected by the use of sand, clay, humus and well-rotted horse manure mixed in proper proportions. This top-soil should be raked or fallowed until it is mellow.

Seeding of putting-greens will be found quite different from that of the fairway. The expense of preparing the green being greater, due to a limited area, than the fairway of given space, it is well to consider the seeding of the very best. Grasses for greens must be fine and dense,

and able to withstand constant wear and treading. The selection of various grasses, such as Bent Stolon, Chewings Fescue, Red Fescue, Creeping and Rhode Island Bents is a matter of personal likes. The method of sowing is similar to that followed on fairways. Broadcasting will prevent the seed from forming ridges of grass which would divert the ball in its course. Do not be sparing in the use of seed, as a dense, even turf is desired in as short a time as possible. The use of seeders of the broadcasting type for fairways is always advisable, due to the uniform work performed.

MILORGANITE (listed on p. 7) will do wonders for new turf. This fertilizer assists in quickly establishing dense, heavy turf on new fairway seedings. Unfertilized seedings on poor soil invariably fail or result in a thin, disappointing stand of grass, difficult to improve by subsequent fertilization or seeding. Even on good soil, a reasonable expenditure for fertilizer will hasten establishment of turf and enable earlier play. The cost of fertilizer, compared with the cost of seed and soil preparation, is so small that new seedings should always receive fertilizer prior to seeding. At this time, fertilizers can be easily worked into the surface soil by discing and harrowing. This insures an abundance of plant food in the soil layer occupied by the root system.

### GREENSKEEPERS' EMPLOYMENT

We have in our files at all times the names of a number of capable greenskeepers whose services are available. We shall be glad to assist anyone in need of such help by putting them in touch with these men.

## Characteristics of Grass Seeds

Variety	Purity of Good Seed	Average Germ Year Old	Average Length Vitality Years	Weight Seed Legal Bush	Weight Seed Actual Bush	Yield of Seed Acre	No. Seeds Average per Lb.
Bents-----	70	30	3	-----	17	-----	6,000,000
Bluegrass—Ken-----	75-85	40-85	1-2	14	14-28	200-350	2,400,000
Bluegrass—Can-----	75-85	40-85	1-2	14	20-24	200-500	2,400,000
Clover—White-----	98	80	10	60	60-63	200-300	700,000
Fescue—Chew-----	95	70	1	-----	22-25	400-500	700,000
Fescue—Red-----	95	72	1	-----	19-23	200-300	500,000
Fescue—Sheep's-----	93	70	1-2	-----	22-25	200-300	700,000
Fescue—Meadow-----	90	93	2	-----	20-30	200-300	350,000
Red Top-----	95-98	93	6	14	12-40	200-300	4,135,900
Rye Grass—Per-----	98	80	2	-----	21-34	250-500	336,000
Rye Grass—Ital-----	98	80	2	20	21-28	500	285,000

*Complete stock on hand at all times*

## Johnson's Recleaned Grasses

### SHEEP'S FESCUE (*Festuca Ovina*)

Thrives well in sandy, shallow soils. Used extensively for polo fields. Weight, 20 lbs. to bushel.

### HARD FESCUE (*Festuca Duriuscula*)

Will resist drought and stand hard usage. Should not be sown alone, due to its tendency to stool. Very useful on polo fields. Weight, 20 lbs. to bushel.

### VARIOUS LEAVED FESCUE (*Festuca Heterophylla*)

Produces an abundance of fine roots and slender growth, forming an excellent turf. Good shade grass. Weight, 17 lbs. to bushel.

### CARPET GRASS

Southern Gulf Coast adaptation. Best adapted to low lands.

### CANADA BLUE GRASS (*Poa Compressa*)

Useful for fairways of Northern States. Very hardy, and will withstand droughts. Weight, 24 lbs. to bushel.

### BERMUDA GRASS (*Cynodon Dactylon*)

A Southern grass that thrives well in hot climatic conditions, south of Virginia. Weight, 37 lbs. to bushel.

### CREeping BENT (*Agrostis Stolonifera*)

South German—an invaluable grass for golf greens; long creeping stems and roots, producing a very durable turf that will withstand severe usage. Weight, 20 lbs. to bushel.

### JAPAN CLOVER

Southern adaptation.

## Familiar Grasses

### CRESTED DOG'S TAIL (*Cynosurus Cristatus*)

Very good in mixtures, forming a clear, dense growth and producing a tough turf of attractive color. Thrives best in Northwestern States. Weight, 23 lbs. to bushel.

### ITALIAN RYE (*Lolium multiflorum*)

Annual or short-lived perennial, distinguishable in the turf form from Perennial Rye-Grass only by the blade being convolute in the bud. Grows well in any soil. Weight, 24 lbs. to bushel.

### CHEWINGS FESCUE, NEW ZEALAND (*Festuca Chewings*)

Considered one of the best grasses for putting greens; used and recommended for either fairways or greens. Produces a mass of fine root leaves; branches being extra-vaginal, plant will spread, making a solid, compact turf. Adapts itself to poor soil. Weight, 24 lbs. to bushel.

### MEADOW FESCUE (*Festuca pratensis*)

Slightly coarser than most grasses. Very durable. Better known as English Blue Grass. Weight, 24 lbs. to bushel.

### RED TOP (*Agrostis Alba*)

It is a perennial, with creeping habit. Makes a medium loose turf. Grows under a great variety of conditions. Best wetland grass among "tame" species. Grows on soil very poor in lime. Strongly drought resistant; used for holding banks to prevent erosion. Chief uses: 1—Sour land grass. 2—Fairways under humid conditions—soils other than limestone. 3—Soil binder.

### WHITE CLOVER (*Trifolium repens*)

Used to a great extent in lawn mixtures, but is not usually welcomed on golf courses. Grows well on poor soil, forming a close, dense mat, and will withstand close clipping. Weight, 60 lbs. to bushel.

### KENTUCKY BLUE GRASS (*Poa pratensis*)

The most noted grass in America. Naturally a native of the Old World, having been early introduced by the early colonists. Seed is harvested mainly in Kentucky, but more or less in Missouri and Iowa also. Seed of highest germination must be dried carefully and then cured during the winter. The grass has creeping underground stems each bearing a tuft of leaves at the tip.

### PERENNIAL RYE GRASS (*Lolium perenne*)

Short lived perennial. Seed bed should be prepared as for other grasses. A fine mellow surface on compact subsoil gives best results. Does especially well when seeded in autumn. Its ability to grow rapidly allows plants to become well established before freezing occurs. Much coarser than other varieties.

### RED FESCUE (*Festuca Rubra*)

Leaves are bright green; does not grow tufts but creeps by underground stems. Only two varieties are used on golf courses—RED FESCUE from Europe and CHEWING FESCUE, native of New Zealand. Withstands more shade and account of fine quality of turf, particularly adapts itself to sandy soils.

### SEASIDE BENT (*Agrostis Maritima*)

A high grade bent seed grown on the Pacific Coast and sold under various trade names.

Does very well all over the northern half of the U. S. and forms a close uniform turf of fine texture and color.

*We ship direct from stock*



## Johnson's Golf Mixtures

Golf Mixtures F. O. B. Chicago, Freight Allowed, Orders for Seed Shipped Same Day Received

### JOHNSON'S FAIR GREEN

A combination of the best heavy weight domestic and imported grasses. The cream of the crop. Desired and recommended by many of the best clubs. Experienced greenskeepers claim this is the best mixture they have used.

### JOHNSON'S PUTTING GREEN

Absolute satisfaction has followed the use of this well known mixture. Producing a dense growth of deep-rooted varieties, forming an excellent putting green. Will "crown" well without loss of vitality.

### CALUMET FAIR GREEN

This excellent combination will produce results on your fairways. A domestic mixture selected for purity, showing the highest possible germination.

### FOREST PRESERVE FAIR GREEN

Well known and used by exacting clubs that demand the best. This mixture, consistent with cost, is an excellent producer.

### SPECIAL FAIR GREEN

A moderate priced quick producing mixture, especially adapted for initial seedings, where a solid, compact turf is desired for early season play.

### CHOICE FAIR GREEN

A very quick producer, where initial turf is desired in hilly spots subject to erosion.



Creeping  
Bent  
Nursery

## Creeping Bent Stolons—Agrostis Stolonifera

Propagated by the vegetative method of planting stolons which are grown in nurseries especially equipped for the purpose. True creeping bent is a turf grass that spreads by creeping stems or stolons on which are joints at short intervals. These stolons, when broadcasted on the surface of the ground and covered with a light top-dressing, take root at the joints or nodes and form individual plants from which grow more runners or stolons that cover the ground very quickly. This characteristic of propagating itself gives creeping bent turf-forming qualities not equalled by any

other grass. This is a decided advantage, as any injury to the turf is quickly healed by the creeping runners. It is adaptable for northern states. Its southern possibilities have not yet been fully determined. There are many strains of creeping bent on the market, but only two or three that have the desirable turf-forming qualities for putting-greens and at the same time the ability to resist to a great extent the ravages of brown patch and other grass diseases. Creeping bent turf has the reputation of having never been known to winter kill.

Due to fluctuations in the seed market, prices are subject to change without notice. A current list will be mailed upon request.

## Johnson Bent Stolon Cutter

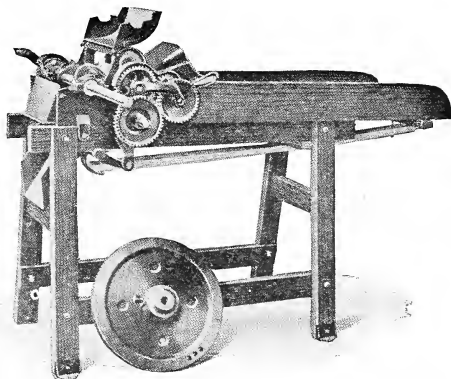
We recommend this machine for cutting up "Bent Stolons" or Bermudas. Can be used by hand or with light power. The 10-inch diameter, 4-inch face pulley is furnished when ordered, at extra charge.

Frame is built of hardwood with mortised joints and is well braced. This cutter is fitted with two knives 10½ inches long.

When used as a power cutter it requires 1 horsepower, speed of cylinder about 300 R. P. M. Weight, 280 lbs.

No. 5—Hand power only .....	\$20.00
No. 10—Hand or power, 2-knife .....	35.00
No. 10½—Power only, 3-knife .....	45.00

Factory Shipment



*Wire your order, our expense*

## Fertilizers, Insecticides, Humus, Eradicators

Poultry Manure  
 Pulverized Sheep Manure  
 Putting Green Mixture, 6-3-2  
 Fairway Mixture, 2-12-4  
 Blood and Bone  
 Bone Meal  
 Acid Phosphate  
 Hardwood Ashes  
 Nitrate of Soda  
 Sulphate of Ammonia

Milorganite  
 Humus  
 Mushroom Soil—Spent  
 Powdered Limestone  
 Tobacco—Dust  
 Tobacco—Flake  
 Ant-Food—MacGregor's Ant Exterminator  
 Charcoal—Powdered  
 Ammo—Phos.  
 Urea.

Write for special prices on ton, five-ton and carlots. In the purchase of fertilizers, eradicator, etc., quality should be the first consideration. The above are selected for high standard of commercial purity, the positive results that are obtained, and are offered on that basis. Our analysis is proof beyond question. Prices on application.

## Fertilizer Analysis—Approximate

Material	Ammonia	Nitrogen	Phosphoric Acid	Potash	Class
Ammo.-Phos. -----	20		20		Inorganic
Sheep Manure -----	1	2t	1.5t	1.5	Organic
Sulphate Ammonia -----	25	20			Inorganic
Bone Meal -----	3	4	27t		Organic
Dried Blood -----	16½	15	1	.8	Organic
Nitrate Soda -----	18	15			Inorganic
Acid Phosphate -----			20a		Inorganic
Hardwood Ash -----				5	Inorganic
Milorganite -----		6½	3	1	Organic
Blood—Bone -----	5	8	8a		Organic
Putting Green -----	6		3a	2	Combination
Fairway -----	2		12a	4	Combination
Mowrah Meal -----	3.36		.85	1.71	Vegetate

## Compost—How Far It Will Spread

Thickness of Layer Inches	Quantity Deposited				Area That 1 Cubic Yd. Will Cover
	Per Sq. Yd. Cubic Yds.	Per 400 Sq. Yds. (Small Put. Gr.)	Per 500 Sq. Yds. (Aver. Put. Gr.)	Per 600 Sq. Yds. (Lge. Put. Gr.)	
Inches	Cubic Yds.	Cubic Yds.	Cubic Yds.	Cubic Yds.	Square Yds.
.1	.0028	1.12	1.40	1.68	360
.2	.0056	2.24	2.80	3.36	180
.3	.0084	3.36	4.20	5.04	120
.4	.0112	4.48	5.60	6.72	90
.5	.0140	5.60	7.00	8.40	72
.6	.0168	6.72	8.40	10.09	60
.7	.0196	7.84	9.80	11.76	52
.8	.0224	8.96	11.20	13.44	45
.9	.0252	10.08	12.60	15.12	40
1.0	.0280	11.20	14.00	16.80	36
2.0	.0560	22.40	28.00	33.60	18
3.0	.0840	33.60	42.00	50.40	12
4.0	.1120	44.80	56.00	67.20	9
5.0	.1400	56.00	70.00	84.00	7.2

*Orders shipped same day as received*

## Milorganite

Milorganite appeals to the greenkeeper because it imparts a deep green color to the turf, promotes long continued vegetative growth, and does not burn or injure the turf.

Furthermore, due to its dry granular mechanical condition Milorganite is easily applied to greens and fairways.

Milorganite sustains long continued growth on old turf, and quickly produces

3000 TONS USED IN CHICAGO AREA ALONE LAST YEAR.

dense turf on new grass seedings, is free from objectionable odors, harmful bacteria and weed seeds of all kinds.

Milorganite contains  $6\frac{1}{2}$  per cent nitrogen (equivalent to ammonia) and  $2\frac{1}{2}$  per cent phosphoric acid.

	Price per Ton
Car lots (15 tons minimum car).....	\$28.60
Ton lots .....	34.00

F. O. B. Chicago

## Urea

Urea is the purest and richest nitrogen plant food on the market. Contains 56% ammonia. Use only  $\frac{1}{3}$  as much as other fertilizers.

Price 143 lb. bag \$15.50 F. O. B. Chicago

## Tobacco Dust

Tobacco is high in potash and tests 24—1.0—4.5 and has 1.5 nicotine which discourages ants, worms, etc., and kills soft bodied insects by contact.

Per ton, F.O.B. Chicago.....\$50 00

## Calogreen

A finely powdered calomel for the cure of small Brown Patch also gives a prolonged protection with no danger of burning the grass. Use 3 oz. per barrel of water to cover 1000 sq. ft.

Price, 5 lb. boxes.....	\$2.77 lb.
25 lb. boxes.....	2.57 lb.
50 lb. boxes.....	2.56 lb.

## Calo-Clor

Calomel with corrosive sublimate for the cure of both large and small Brown Patch and the eradication of earth worms. Cheaper to use, fewer applications. Use 3 oz. per 1000 sq. ft. of green.

Price, 5 lb. boxes.....	\$2.90 lb.
25 lb. boxes.....	2.70 lb.
50 lb. boxes.....	2.65 lb.



## Arsenate of Lead

Experiments over a period of six or seven years show no harmful reaction to turf.

Five pounds per 1000 square feet will eliminate Worms and Grubs and show a decided check in Poa Annua, Chickweed, and Crab Grass.

Due to fluctuation of market, prices on application.

Complete stocks at all times

## NU-GREEN (Combination disinfectant and fertilizer)

NU-GREEN is a combination of Brown Patch Disinfectant and a Fertilizer. No need of the bother and inconvenience of mixing the ingredients yourself. No fear of unbalanced quantities of disinfectant and plant food. No danger to grasses from improper mixture.



To prevent Brown Patch from putting in an appearance, once each ten days or two weeks, beginning prior to the Brown Patch season apply a solution of one pound Nu-Green to 50 gallons of water. Use at the rate of 50 gallons of solution to 1000 square feet of green area.

By using a power sprayer good results have been obtained by using 1 lb. Nu-green in 50 gal. water to cover 2500 sq. ft. A prevention application once a week.

As a Cure if you have Brown Patch use one pound in 35 gallons of water and use at the rate of 50 gallons of the solution to 1000 square feet.

5 lb. tin .....	\$ 9.00	100 lb. drum.....	\$145.00
25 lb. pail .....	37.50	300 lb. drum.....	420.00
F. O. B. Chicago			

## SEMESAN for "Brown Patch" Control on Golf Greens

The principal ingredient of Semesan is a complex organic substance, made from carbolic acid, chlorine and mercury, which is known scientifically as hydroxymercurichlorophenol or, more popularly, as chlorophenol mercury.

With this extremely effective chemical are compounded certain other substances that intensify its disinfecting properties and make it possible to apply Semesan by the quick convenient and non-laborious method of water solution treatments.

Semesan possesses highly selective toxic qualities, by virtue of which it is deadly poisonous to the lower forms of life, such as the "Brown Patch" fungi, yet at the same time harmless to the higher types of life to which the grasses and plants belong. In fact, authorities now recognize that its effect upon seeds and plants is stimulatory and in no way injurious, as is corrosive sublimate.

Unlike other disinfectants and fungicides, such as Bordeaux mixture, Semesan may be used as frequently as conditions demand without accumulating in the soil as a poison detrimental to the purpose for which it is employed.



1 lb. tin .....	\$ 2.75	100 lb. drum.....	\$220.00
5 lb. tin .....	13.00	300 lb. drum.....	645.00
25 lb. pail .....	56.25		



## High Pressure Tank Sprayer

This sprayer, unexcelled for spraying Brown Patch spots, may be carried over shoulder and spots sprayed with Nu-Green early in the morning. Drives the fungicide to the grass roots under high pressure.

4 gallon Brass or Galvanized tank with 27" Hose and 18" extension pipe with nozzle.

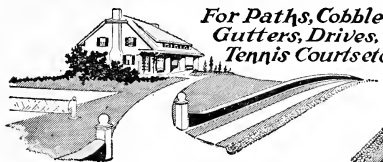
TS1—Galv. Tank—Each .....	\$6.50
TS2—Brass Tank—Each .....	9.00

*As wholesale distributors our stocks are complete*

## "HERBICIDE"

THE WEED EXTERMINATOR

*For Paths, Cobble  
Gutters, Drives,  
Tennis Courts etc.*



"When diluted 1 part to 40 parts of water, HERBICIDE destroys both the tops and ROOTS of undesirable vegetation. It is used to great advantage by golf clubs for keeping weed growth out of sand traps. It is also used extensively by cemeteries and parks for keeping drive-ways and paths free from weeds. HERBICIDE gets rid of weed growth without disturbing the surface of the ground and is therefore a great help for use on tennis courts." 1 gal. mixture covers 2 to 3 sq. yds.

1 gallon can .....	\$ 1.90
5 gallon can .....	7.50
10 gallon can .....	12.50
30 gallon drum .....	30.00
50 gallon drum .....	45.00

F. O. B. Chicago

## MacGregor's Ant Food

For Exterminating Ants.

For several years MacGREGOR'S ANT FOOD has been used on the largest Estates and Golf Courses in the United States with truly wonderful success. Proof of this statement can be had, testifying as to results obtained from the use of this ANT FOOD, from satisfied customers.

### PRICES

Half pound .....	\$0.50
Single pound .....	1.00
5 lb. pkg. ....	.95 per lb.
10 lb. pkg. ....	.90 per lb.

## Cyanogas

(A powder for eliminating squirrels and rodents from golf courses and estates.)

A teaspoonful placed in the opening of a burrow and the opening closed will kill all gophers, squirrels and crayfish in that burrow. It is a sure cure.

### PRICES

5 pound tins .....	\$2.75
25 pound tins .....	9.25

## Electric Worm Eradicator



A liquid, positive in action, applied with a Johnson barrel cart or sprinkling can at the rate of 1½ pints in 50 gallons of water, covering 600 square feet. Two gallons required for the average green. Will not burn the grass. Shipped in 5, 10, 15 and 50 gallon containers.

Price. Per gallon .....	\$3.00
50 gal. bbl., per gal.....	2.70

F. O. B. Chicago

## Mowrah Meal

A worm remover in powder form, easy to apply, acts as a fertilizer and its effects are lasting. Made from a nut imported from India. Apply at the rate of 15 pounds per 1000 sq. ft. of green, and water in thoroughly. Has a fertilizer content of 3.36 ammonia and 1.71 potash. Price per ton.....\$50.00

F. O. B. Chicago

## Corrosive Sublimate

(Bichloride of Mercury)



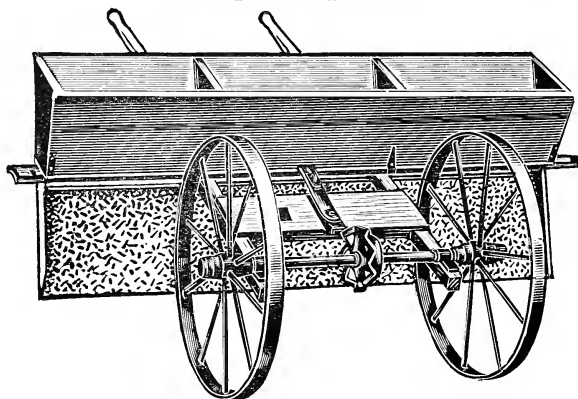
Used by a number of Clubs as a Worm Eradicator and Brown Patch Remedy. Bichloride is especially useful for the control of Snow Mould.

Never use more than three ounces in fifty gallons of water to cover 1000 sq. ft. First dissolve three ounces with three ounces Muriate of Ammonia or with an equal quantity of table salt.

5-lb. boxes, per lb.....	\$2.15
25-lb. boxes, per lb.....	2.10

*Every item in this catalogue carried in stock*

## Thompson Spreader



The old reliable Thompson Spreader improved to handle all of the modern commercial fertilizers. Spreading range 1 to 10 lbs. per 100 square feet. Spreads 6 feet wide as fast as a man will walk, in any quantity desired. Will hold 100 lbs. to 150 lbs. of Milorganite or similar fertilizer.

The wheels have a 3" face and will not injure the finest turf.

All materials are released to the scatter-board with a force feed broadcasting motion, and leaves the scatter-board 6" from the ground.

No. 208, F. O. B. Chicago .....\$50.00

No. 110—Smaller than the No. 208 and intended for lighter work, especially for the application of chemicals such as Semesan, Arsenate of Lead, etc. with sand or other material as a carrier. Will hold 1½ bu. of fertilizer.

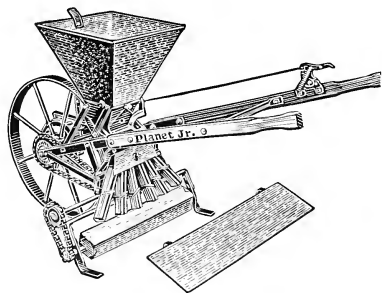
No. 110, with scatter-board .....\$27.50

No. 110, without scatter-board .....25.00

No. 112—This spreader is the same design as the No. 110, but reduced in size. The hopper is 30" wide and is intended for lighter work than the No. 110.

Price, F. O. B. Chicago .....\$13.50

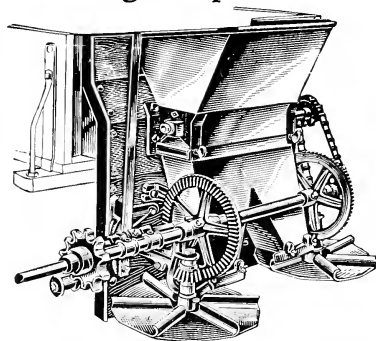
## No. 235 Fertilizer Distributor



The No. 235 distributor is one of the best on the market, and will handle grass seed, Milorganite and all commercial fertilizers. Used extensively for spreading Arsenate of Lead with Milorganite. Hopper holds about 100 lbs. Tire is 4" wide. Machine is very accurate and spreads material evenly.

Price, F. O. B. Chicago .....\$45.00

## Endgate Spreader



Fits on any wagon box, is driven by a sprocket on wheel. Will spread any prepared fertilizer up to 20 feet in width and from 150 lbs. to 5 tons per acre. Handles Milorganite, Ammo-Phos, 6-3-2, etc. Especially made for a rapid fairway spreader.

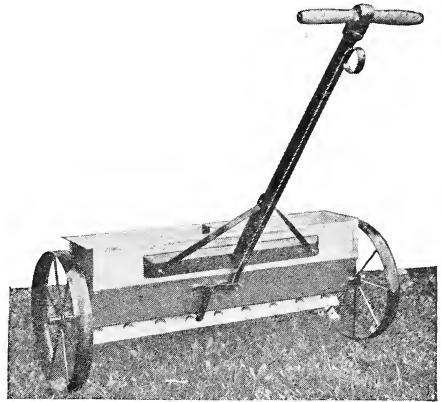
ES1—Price .....\$33.50

*Prices subject to change without notice*

## Fertilizer Distributor

For commercial fertilizer, sheep manure, etc. Wide wheels, convex tire, wobble type agitator, distributor board 3 feet wide. Adjustable screw, hand control, light weight, positive feed. Can be used as grass seeder.

FD-1 ----- \$20.00



## Johnson Sprinkling Cart

For applying Ammo-Phos, Semesan, Sulphate of Ammonia, worm eradicators, etc., in liquid form. More economical as to labor and fertilizers than the ordinary watering can. Flow and shut-off rod from rear.

### SPECIFICATIONS

Barrel, Wood, 50 gallons—Painted green and white.

Chassis, Steel construction.

Wheels, Steel, 36 in. high.

Tires, 4 in. wide—flat.

Boom, 7 ft. wide—holes drilled 1 inch apart.

Valve, Brass—can be adjusted by operator from rear.

BSC-1—Price, \$30.00, F. O. B. Chicago.



## Eureka Sprayer

The Eureka is intended for golf courses that want a good practical outfit at a reasonable price. It is built for hard service. Develops a working pressure of 200 pounds and is equipped with a large air pressure tank, to maintain a high pressure and steady discharge. It can be used on bent greens, in orchards, flower gardens, shrubbery, vineyards, gardens, stock barns, cattle pens, hen houses or for white-washing, cold-water painting, disinfectants, etc. It is made in the hand drawn style as shown.

Pump—Our regular No. 4 is used, mounted on side of barrel.

Tank—30 gallon welded steel barrel. This avoids the common trouble experienced with wood barrel of drying and warping when not in use so that it is impossible to make it tight again.

Pressure Tank—Boiler steel with welded seams; tested under a pressure of 275 pounds. Fitted with pressure gauge reading to 200 pounds.

Wheel—30 inches diameter, 2 inch tire. Fastened to tank with heavy bolts.

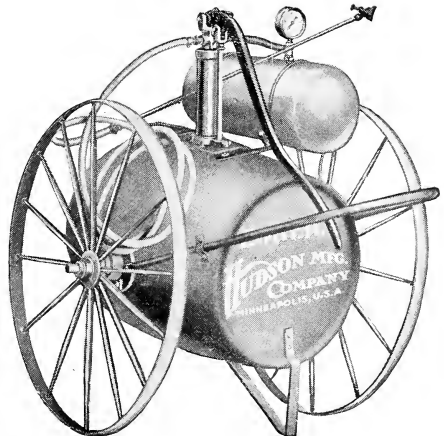
Frame—Steel tubing, handle of same material.

Discharge Equipment—4 ft. of  $\frac{1}{2}$  in. spray hose, a 4 ft. iron pipe extension, angle Ideal spray nozzle and leakless shut-off valve.

Shipping Weight—Securely crated, No. 22, 235 lbs.

U. S. No. 22. Hand drawn as shown.

Price ----- \$50.00

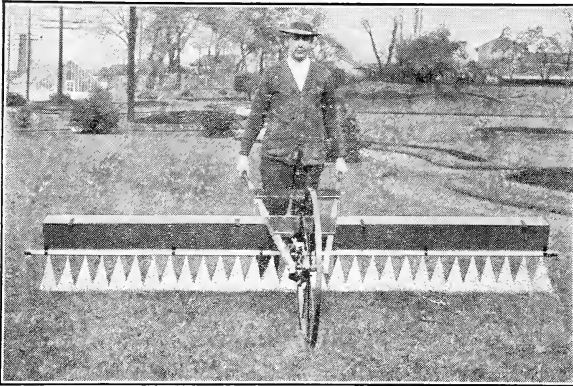


*Wire your order, our expense*

## Thompson's Wheelbarrow Seeders

For Sowing All Grass Seeds Broadcast

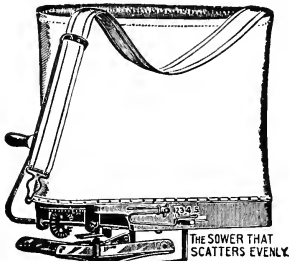
This outfit particularly adapted for Golf Grounds, Cemeteries and Parks



The **No. 106**—10-foot Thompson Grass Seeder illustrated is for sowing all solid or re-cleaned seeds, such as Red Top, Orchard Grass, Clean Blue Grass, Rye Grass or any other seeds of the same size or nature in any quantity per acre desired.

Price of No. 106 F. O. B. Chicago.....\$20.00

### Seed Sower

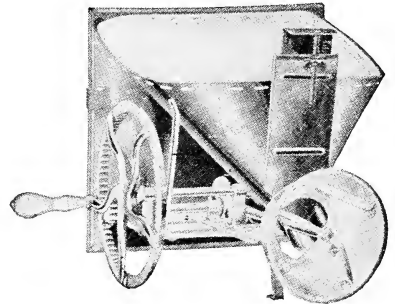


No. CS-1

A sower that gives an even distribution of seed. A favorite among low-priced seed sowers.

CS-1—Single Fan.....\$1.75  
CS-2—Double Fan.....2.25

### Broadcast Seeder



Will sow any kind of grass seed at rate of four to eight acres per hour. Seed is scattered from 8 to 20 feet on each side.

HS-1. Each.....\$4.50

### Weed Stinger



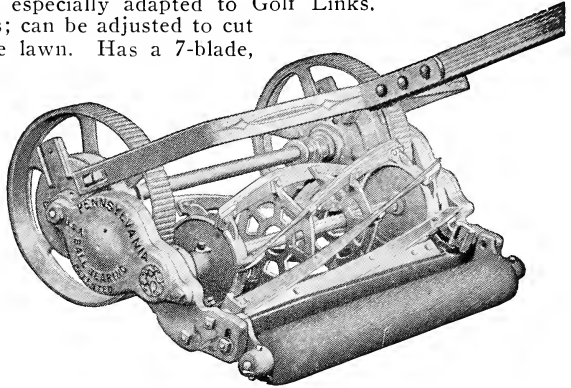
The most practical tool for killing dandelions or weeds. Tubular shape, holding a quantity of gasoline or chemical. Thrust the point into the heart of the weed, which automatically releases a fixed supply of solution along the point, which is deposited into the wound. After several hours the dandelion will wither and disappear. Positive and fast in action. **WS-2**—Can be sent by parcel post—Price F. O. B. Chicago.....\$3.75

*Articles cataloged have been selected on quality*



## Pennsylvania New Aristocrat Golf Mower

The NEW "ARISTOCRAT" is especially adapted to Golf Links, Tennis Courts, and Bowling Greens; can be adjusted to cut 3/16 inches, practically shaving the lawn. Has a 7-blade, high-speed cylinder, 5 1/2" in diameter, and a train of three cut gears on each side, with six pawls to prevent lost motion. The cylinder is equipped with the new Braun Self-aligning Ball Bearings; the wheels and intermediate gears with roller bearings.



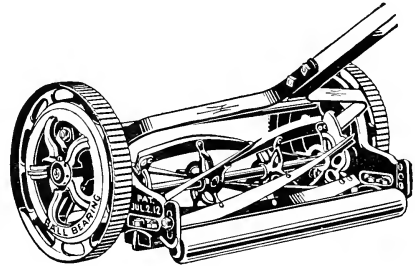
Made in one size only—19 inch.  
Net weight, only 58 lbs.

Price without grass box...\$40.00  
Extra for grass box..... 8.00

## Tee and Bunker Mowers

Genuine Timken Roller Bearings—Self-Adjusting Triple Gears

This exceptionally fine mower is especially made for tees, bunker and lawn work. Has genuine Timken Roller Bearings, with patented self-adjusting device to take up all wear. 10-inch drive wheels, 5 heavy tempered steel blades, bottom knife raised edge Chrome Vanadium Steel, self-sharpening, can be adjusted to cut as low as 1/16 inch. All parts accurately machined. Hardwood handle, hard maple wood roller. Unconditionally guaranteed.



**Note:** These mowers measure full width.

Sizes

TM-1—Triumph—T.R.B., Triple Gear.....	\$17.00	\$17.50	\$18.00
CL-1—Crestlawn—B. B. ....	16.00	17.00	17.50
FEN-1—Fenden—B. B. ....	15.00	15.50	16.00

## Chickweed Killer

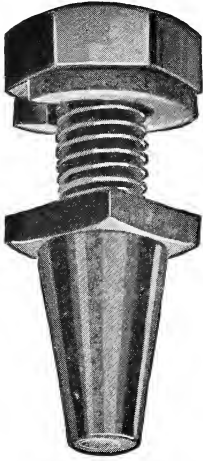
PURFECK chickweed eliminator will positively kill all chickweed without injury to the grass.

It is sprayed directly on the spots with a small sprayer. Best results by spraying in Spring and Fall. Elimination affected in 12 days. 1 gallon makes 3 of spray.

1 gallon .....	\$2.00	10 gallons .....	\$17.00
5 gallons .....	9.00	50 gallons .....	60.00



*For Additional Hand Mowers See Page 18*

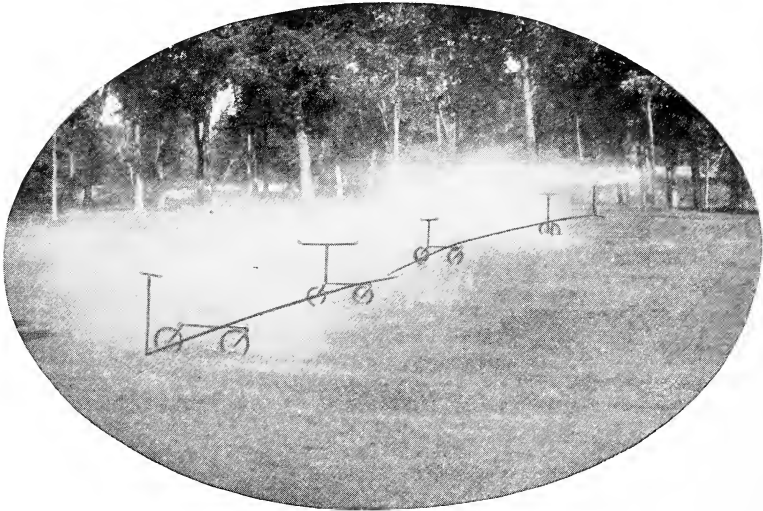


HORNER

## Tractor Wheel Spikes

Horner spikes round shoulder $\frac{3}{4}$ x $1\frac{3}{8}$ " with $\frac{1}{2}$ " thread, each.....	11c
Horner spikes square shoulder $\frac{3}{4}$ x $1\frac{3}{8}$ " with $\frac{5}{8}$ " thread, each.....	15c
TORO—Hex shoulder spikes $\frac{3}{4}$ x $1\frac{1}{2}$ " with $\frac{1}{2}$ " thread, each.....	20c
Al. Hackbarth round shoulder spikes $\frac{3}{4}$ " x $1\frac{1}{2}$ " with $\frac{1}{2}$ " thread, each .....	15c
Staudé spike Hex shoulder $\frac{3}{4}$ x $1\frac{1}{4}$ " with $\frac{5}{8}$ " thread, each.....	20c
Fordson spikes $\frac{5}{8}$ x 1" with $\frac{3}{8}$ " thread, each.....	10½c
Toro Junior round shoulder $\frac{5}{8}$ x1" with $\frac{3}{8}$ " thread .....	16c
(All spikes have Nuts and Washers.)	

## Toro "Sea-Serpent" Fairway Sprinkler



In the Sea-Serpent we offer a very effective device for watering fairways. On 40 lbs. pressure will cover 60x160 ft. of area, and greater areas on higher pressure.

On ordinary fairways one man can move it from place to place. The most practical fairway sprinkler we know of. Comes complete with 4 heads, pipe and all truss rods. Uses  $1\frac{1}{2}$ -inch hose.

Price, F. O. B. Minneapolis.....	\$200.00
Price, F. O. B. Chicago.....	205.00

*Wire or phone your orders at our expense*

## Toro Golf Course Equipment

### Toro Standard Push Tractor



Consisting of the Toro tractor complete with 3 or 5 mowers. Is entirely flexible. will cut slopes, sides of bunkers, saucer shaped depressions; in fact, any part of the course. The tractor is powered with a heavy duty tractor motor and comes complete with magneto, governor, brake and air cleaner. All bearings are heavy duty tractor roller or ball bearings; gears are nickel steel of the finest possible workmanship.

Tractor may be started on the steepest hill without injury to the turf. Grass is all cut before the tractor crushes it down, insuring a clean fairway. Operator can see his mowers at all times. **THIS OUT-FIT MAY BE BACKED UP. MOWERS WILL NOT TANGLE UP.** Has a new

steering device whereby all steering is done by power, and so easily a child can steer it. In fact, handles easier than a car. A belt pulley may be had for this tractor.

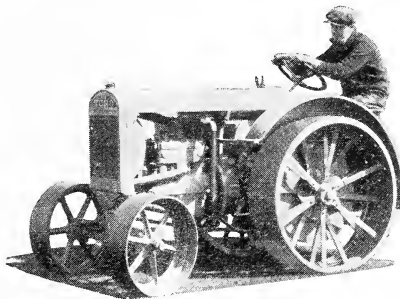
Tractor with 5 mower units.....	<b>\$1,560.00</b>
Tractor with 3 mower units.....	<b>1,295.00</b>

(f. o. b. Minneapolis)

Tractor with 5 mower units.....	<b>1,595.50</b>
Tractor with 3 mower units.....	<b>1,324.50</b>

(f. o. b. Chicago)

### Toro Universal Tractor



This tractor is the same as the one above, except is a pull type instead of the push. Has the same heavy duty long-lived motor with governor, brake, magneto and air cleaner.

The same high quality of workmanship and materials will be found.

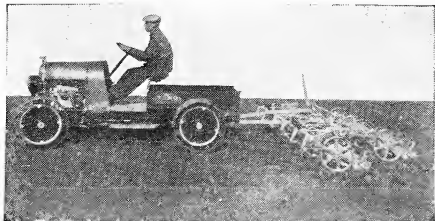
This machine will do all the construction work as well as cutting and general up-keep duties, and will not injure the course. With this magneto-equipped machine all need of "hot shot" batteries is done away with, as it will start on one turn of the crank in coldest weather. This machine is the lowest in gas and oil and general up-keep expense that we know of, and we absolutely guarantee it in every way.

Toro Universal Tractor, F. O. B. Minneapolis .....	<b>\$870.00</b>
Toro Universal Tractor, F. O. B. Chicago .....	<b>895.00</b>
Belt Pulley for Toro Tractors, extra .....	<b>35.00</b>

*Wire your order, our expense*

## TORO GOLF COURSE EQUIPMENT—Continued

## Toro Whippet Tractor



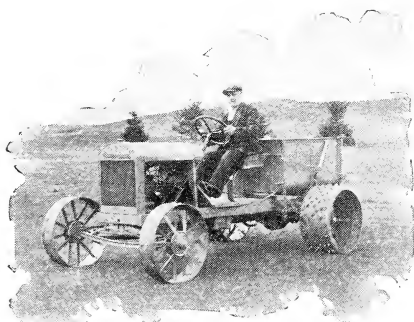
In the new TORO WHIPPET we have built a thoroughly satisfactory and efficient machine from every conceivable operating angle, and along with it, have provided a smart, distinctive appearance that will match the beauty of your Club House and Grounds. Mechanically the new TORO WHIPPET is far in advance of any of the present light weight Golf Course Tractors. The motor is of modern design, four cylinders, with an SAE rating of 15.6 horse power, but with an actual break horse power of 31.

Three speed sliding gear transmission, electric starter and generator, four wheel brakes, three gallon radiator with pump circulation and aeroplane type fan.

The TORO WHIPPET is made in two styles, the standard comes complete with a stationary box as pictured. The SPECIAL WHIPPET comes without the box and with a one foot shorter wheel base.

Price Standard WHIPPET with box F. O. B. Minneapolis.....	\$650.00
F. O. B. Chicago.....	666.00
Price Special WHIPPET without box F. O. B. Minneapolis.....	625.00
F. O. B. Chicago.....	640.00

## Toro Junior Tractor Model 30



The new Junior tractor is motored with a heavy duty MODEL A FORD MOTOR 39 H. P. with a large fund of reserve power. It is furnished complete with starter, generator and battery. The rear axle is a heavy bevel gear axle built especially for heavy pulling and will transmit full possible drawbar horse power without over-straining the axles. The axles are 50% larger in diameter and have more than 2½ times the driving strength than the shafts in an automobile axle.

Frame is Toro built of 5" channel iron and is spring mounted reducing road shocks.

Dump body is all steel of one yard capacity and angle of dump is such that material slides out cleanly.

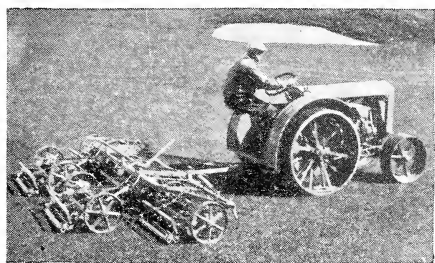
Front wheels are 7x27, Rear 15x30 with rolled edges with 144 spikes each. 3 speeds forward and one reverse. Maximum speeds: low 4 miles, 2nd, 8 miles, high 18 miles per hour.

Model A 71" wheel base without dump body.			
F. O. B. Minneapolis .....	\$695.00	F. O. B. Chicago .....	\$715.00
Model B 98" wheel base with steel dump body.			
F. O. B. Minneapolis .....	\$760.00	F. O. B. Chicago .....	\$782.00

*Complete stock on hand at all times*

## TORO GOLF COURSE EQUIPMENT—Continued

### Toro Flexible Pull Frame Mower



This mower is the most flexible outfit on the market. At a moment's notice may be changed from a 5 to a 3 by simply removing two outside units and wings. For narrow places outside wings may be raised, allowing outfit to go through a 9-foot space. Wings lifted with a winch.

All units are full floating and will conform to the contour of the ground, insuring an even, clean cut. Due to the heavy, rugged construction of outfit it is a good rough mower and will stand up where others go to pieces. Will fit any make of tractor.

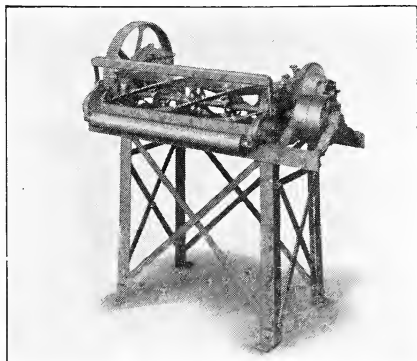
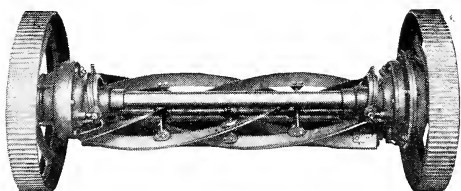
Toro Pull Frame Mower for the tractor with 5 units.....	\$675.00
Toro Pull Frame Mower for the tractor with 3 units.....	420.00
Toro Pull Frame Mower for horse, with shafts or pole, 3 unit only.....	400.00
(f. o. b. Minneapolis)	
Toro Pull Frame Mower for the tractor with 5 units.....	\$687.00
Toro Pull Frame Mower for the tractor with 3 units.....	428.00
Toro Pull Frame Mower for horse, with shafts or pole, 3 unit only.....	408.25
(f. o. b. Chicago)	

If 6 blade reels are wanted instead of 5, add \$5.00 per unit.

### Toro Super Unit—30-inch Cut

This superior unit is standard equipment on all completely equipped Toro power and horse-drawn mowers. The most sturdily constructed unit that can be made; durable and economical in operation. Drop forged, heat-treated machine cut gears. Full ball and roller bearings. Double edged bed knife. Dustproof throughout.

F. O. B. Minneapolis .....	\$115.00
F. O. B. Chicago.....	117.00
With 6-blade reel.....	122.00



### Toro Re-Grinding Stand

This stand built for regrinding Toro fairway units. May be belted to any power, and by the use of emery and oil the blades may be reconditioned in a short time.

By the use of this tool mowers may be sharpened rainy days in summer and kept in perfect cutting condition.

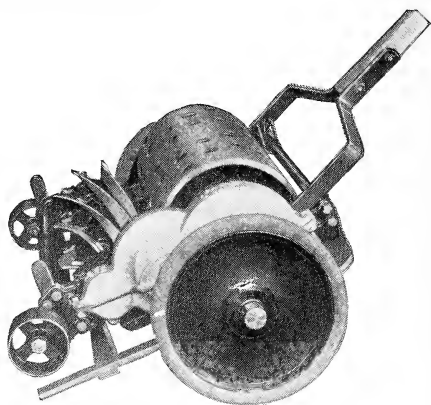
Price, F. O. B. Chicago.....	\$26.00
Price, with motor attached.....	61.00

*All prices F. O. B. Chicago unless otherwise noted*

## Toro Putting Green Mower

A perfected putting green mower with 17½ inch cut, built especially for Creeping Bent. Ball and roller bearings throughout. This mower is light weight and easy to operate. Drop forged, heat-treated machine cut gears, aluminum gear cases, alemite lubrication. Guaranteed not to leave corrugations on the green. Complete with grass catcher, transport cart, grease gun and regrinding handle.

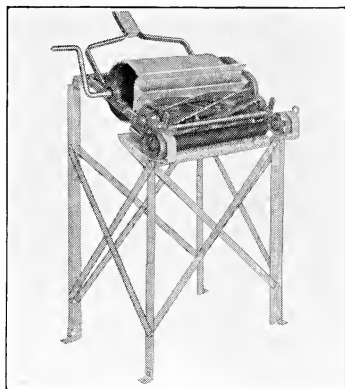
F. O. B. Minneapolis .....\$75.00  
F. O. B. Chicago..... 75.80



## Putting Green Mower Grinding Stand

This stand built for holding mower while grinding. In a very few minutes, and without tearing down the mower, it may be sharpened with emery and oil to a perfect cutting edge. A big time saver.

Price, F. O. B. Chicago.....\$24.00

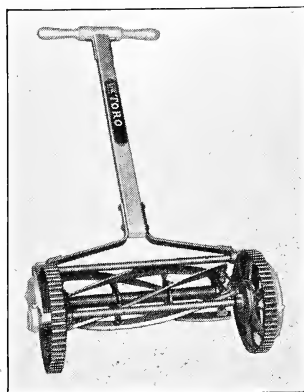


## New Toro Silver Flash

The best mower made. Reel and bedknife are assembled in one unit, making a floating assembly. Weave of side frames cannot affect relation of reel to bedknife. Steel gears, full ball and roller bearings, 6" reel, 10" drive wheels, 2 sets of dogs in drive wheels instead of pawls. Long wheelbase insuring smooth cut. Three different types of reels for different uses.

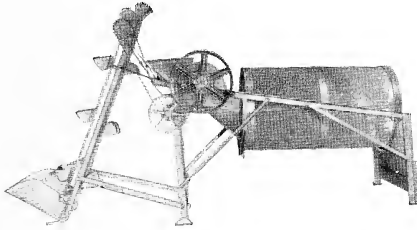
4 blade (for bunkers).....\$34.80  
6 blade, Standard..... 35.80  
8 blade (for cutting Bent)..... 38.80

F. O. B. Chicago.



*All orders shipped direct from stock*

## Toro Compost Machine



Will pay for itself in labor saved within a short time. Has cylinder for breaking up lumps. Screen is 36 inches in diameter. Requires about 3 horsepower to operate. Will pulverize and screen compost at the rate of 6 to 8 yards per hour.

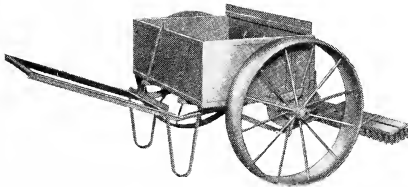
Toro Compost Machine with elevator .....\$325.00

Transport truck extra..... 50.00  
(f. o. b. Minneapolis)

Toro Compost machine with elevator ..... 335.00

Transport truck, extra..... 55.00  
(f. o. b. Chicago)

## Improved Toro Top Dresser



For spreading top dressing over the surface of putting greens. Will top dress a green in  $\frac{1}{3}$  the time required to do it by hand. Will put on a heavy or light dressing, as desired. Machine is light in weight and easy to handle.

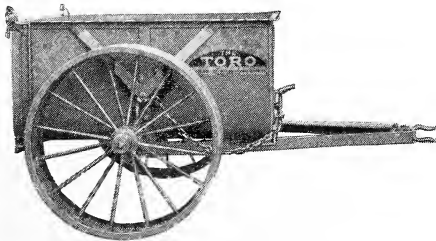
The new top dresser has an agitator for keeping material moving and a more accurate adjustment for feed.

Comes equipped with a brush for brushing in dressing.

Toro Top Dresser (f. o. b. Minneapolis) .....\$100.00

Toro Top Dresser (f. o. b. Chicago) ..... 102.00

## Toro Dump Wagon



The 1929 model Toro wagon is much superior to the old type. It is all steel with electrically welded body, the box is deeper, but is low down so that it can be loaded easily without the necessity of throwing the dirt too high. It has a full yard capacity, and being close coupled, it is easily handled and will stand up under hard service. Weight, 720 pounds.

Price, F. O. B. Chicago.....\$121.00

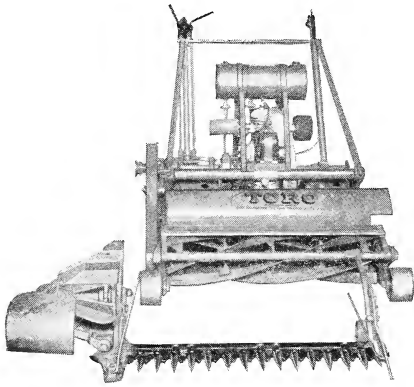
F. O. B. Minneapolis..... 115.00

**NOTE—WRITE FOR TORO CATALOGUE FOR COMPLETE DETAILS AND SPECIFICATIONS ON ALL TORO EQUIPMENT.**

*Toro equipment carried in stock*

## TORO GOLF COURSE EQUIPMENT—Continued

### Toro "Park Special"



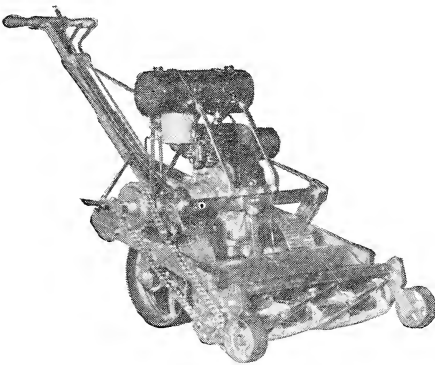
This 30-inch, one-man mower is operated by a gasoline engine and is supplied with either sickle bar or reel. The same reel is used as in the Toro Super Mower, and the entire machine, while light in weight and easy to handle, is supremely efficient. The sickle attachment is readily attached or detached and affords the easiest possible means of dealing with those patches that formerly required either men with scythes or horse-drawn farm machines. Will also do all the regular cutting and trimming about the place.

Toro "Park Special" with either reel or sickle .....	\$325.00
Either reel or sickle attachment extra.....	95.00
Grass-catcher extra .....	10.00
(f. o. b. Minneapolis)	

Toro "Park Special" with either reel or sickle .....	329.00
Either reel or sickle attachment extra.....	96.00
Grass-catcher extra .....	12.00

Either reel or sickle attachment extra.....	96.00
Grass-catcher extra .....	12.00
(f. o. b. Chicago)	

### Toro Park Junior



This 22-inch model has the same  $2\frac{1}{2}$ -H. P. motor as in the larger machine, but has a wheel drive which makes it an ideal machine for bunkers, etc.

Has a power driven reel and a very simple handle for operating traction and reel.

Price, F. O. B. Minneapolis .....	\$265.00
Price, F. O. B. Chicago.....	268.00
Price with 7-blade reel .....	275.00
GRASS CATCHER EXTRA.....	10.00

### Toro Bag Rack



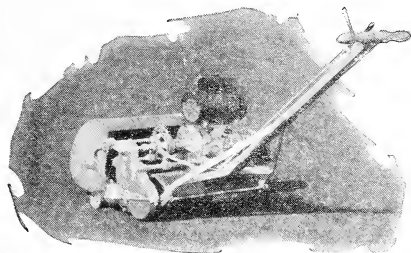
Placed at each green for holding bags for clippings. Folded up and placed to one side when not in use.

Price, each .....	\$4.50
Price, bags, each.....	.60

*Complete stock of Toro parts in Chicago*



## Toro Power Putting Green Mower



This mower combines the same basic principle of general design and operation that has made the Toro hand mower famous. A-1 H. P. horizontal 4-cycle air cooled motor gives ample power with little vibration.

Aluminum gear case. Machine cut steel gears, ball and roller bearings throughout: 8 blade, 5" reel, 19½" in width. Raybestos lined cone clutch practically indestructible, smooth starting.

A power driven Transport Carrier is offered as additional equipment for carrying mower from green to green.

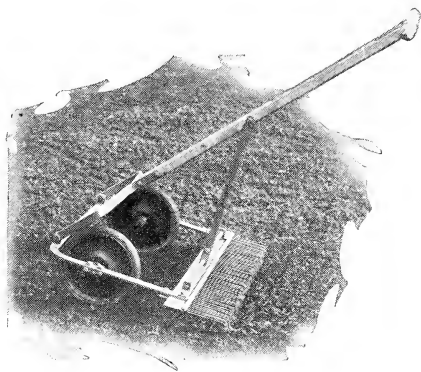
Price, F. O. B. Minneapolis.....	\$285.00	F. O. B. Chicago.....	\$287.00
Transport Truck, extra.....	\$41.00		

## Toro Del Monte Greens Rake

Here is the new Toro Del Monte Greens Rake, which is the best tool we have ever seen for raking up bent greens. It is named in honor of Mr. Joseph Mayo, Superintendent of Pebble Beach Golf Course, Del Monte, California, who first suggested the idea to us.

Exhaustive tests have proven conclusively that it is the best device of its kind for raking and aerating bent greens, and we earnestly suggest that you send us your order for either one or a full set.

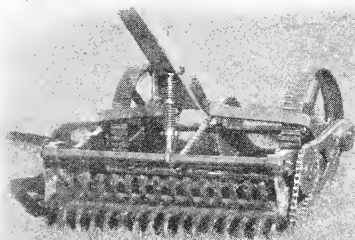
Price, F. O. B. Chicago.....\$15.50



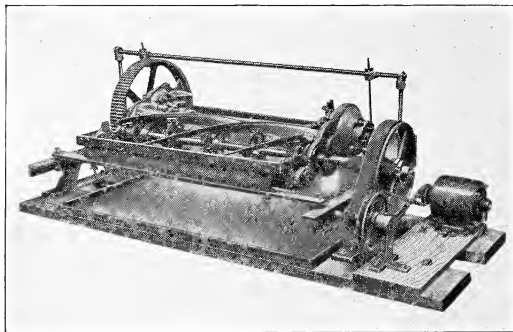
## The Toro Greens Brush

This brush is similar in action to a lawn mower in that the brush revolves at high speed and causes the grass to be lifted in an upright position. It is highly successful for taking grain out of Bent Grass, also for stimulating the growth, removing worm casts, and working in top dressing. It is a handy and very efficient tool for cultivating a good stand of turf on either greens or tees. It is particularly advantageous for use on any kind of Bent.

Price, F. O. B. Chicago.....\$34.50



## Justrite Motor Driven Mower Sharpener



No. JR-1

THE JUSTRITE LAWN MOWER SHARPENER will sharpen any make of hand or power driven lawn mower and will sharpen them quicker and better than any device known. It is not necessary to remove the roller or handle, in fact only one wheel is removed and the lawn mower placed in the machine ready to start sharpening. The JUSTRITE process of sharpening with emery and oil the reel knives and cutter bar is the only practical method to accurately sharpen a lawn mower so that it will produce a smooth, easy running, cutting lawn mower.

JR-1—Heavy Type Mower Sharpener.....\$95.00

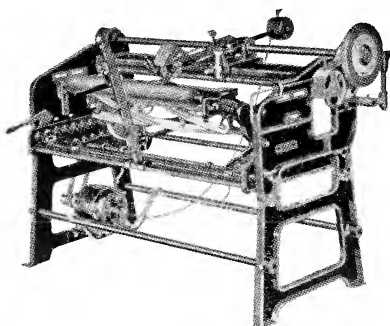
JR-2—36-inch Machine ..... 62.00

JR-3—48-inch Machine ..... 72.00

Complete with chucks, 10 lbs. emery,  $\frac{1}{4}$  H. P., 110-volt, 60-cycle motor.

Factory Shipment.

## Peerless Lawn Mower Grinder



Blades 40 inches long and less can be ground perfectly in half the time required by the old method.

The spiral knives of the 30-inch units and hand mowers can be sharpened without removing them from the mower.

Will give any desired clearance behind the cutting edge.

Saves additional expense of shipping mowers away for sharpening.

Is furnished with motor and special 10-inch grinding wheel attached if so desired.

For power only, speed 1100 R. P. M. Either  $\frac{1}{3}$  or  $\frac{1}{2}$  H. P., 110 Volt, A. C. 60 Cycle, Single Phase motor. With  $\frac{1}{2}$  H. P. motor additional machinery can be operated.

Length over all ..... 5 ft.

Width over all ..... 27 in.

Height over all ..... 40 in.

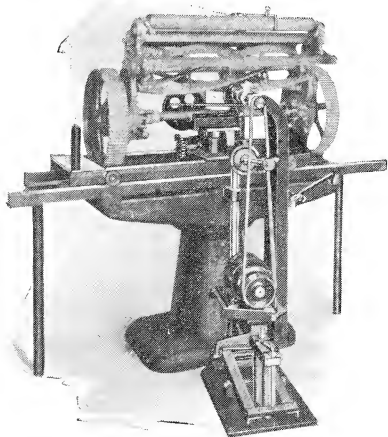
Shipping weight ..... 550 lbs.

PG-1—Price (Complete .....\$295.00

PG-2—Price (without motor) ..... 250.00

Factory Shipment.

## The Hardinge Mower Sharpener



The Hardinge Mower Sharpener was designed to sharpen quickly and accurately any kind of lawn mower. Putting Green, Fairway, hand or mowers with herringbone blades.

It is constructed of most durable material and is so stable as to carry the heaviest mowers with no vibration when operated at high speed.

Sharpens the bed knife as well as the reel, and does not require an expert mechanic to operate it.

The grinding wheel is cup shaped and is the only form of wheel that will grind the front edge of the bed knife, the inside surface of the bed knife and the reel blades.

Price, F. O. B. Chicago.....\$325.00

*All orders shipped direct from stock*

## Pennsylvania Lawn Cleaner

This machine will remove from the lawn not only the cut grass, but all sorts of litter and leaves and trash, leaving the grass standing upright and free from foreign matter that prevents the sunlight and dew from getting to the roots.

The brushes are recommended for removing worm-casts from putting greens, tennis courts, bowling greens and other close-cut lawns, where a smooth surface is essential. It can also be used as a lawn or sidewalk cleaner for removing leaves and other litter.

Provision is made for adjustment to take up the wear of the brushes, thus insuring the same efficiency of the sweeper until the brushes are entirely worn out.

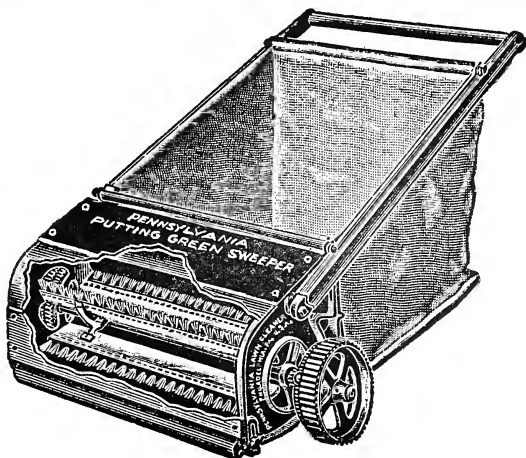
The change from rakes to brushes, or vice versa, is easily made without taking the machine apart.

Width, 24 inches.

Price, each F. O. B. Chicago.....\$30.00

Extra Set Rakes or Brushes..... 8 00

Always designate "Rakes" or "Brushes" when ordering.



LC-1

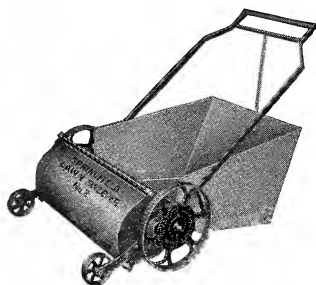
## Springfield Lawn Sweeper

For Parks, Cemeteries, Golf Grounds,  
Estates, Residences, Etc.

Collects fresh-cut and dead grass, leaves, sticks, stones, worm casts and other litter. Reduces labor from hours to minutes. Beautifies the grass. A real necessity for the quick and economical upkeep of lawns and grounds. Labor-saving, money-making machine. Efficient, durable.

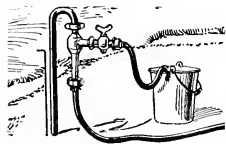
The Springfield Sweeper is equipped with powerful 12-inch Brush Reels, with eight individual brushes to each reel. Sweeps a width of 36 inches.

Price, ..... \$42.00  
Factory Shipment.



Springfield Lawn Sweeper No. 2.

## Johnson's Crebent Fertilizer Distributor



This distributor permits the application of any water soluble fertilizer or fungicide in any quantity with absolute safety. It eliminates the expensive method of mixing with top dressing. One man can fertilize a green in 12 to 15 minutes. Operates on 14 lbs. pressure.

Absolutely guaranteed and subject to return if not satisfactory.

CFD1—Price, complete with 6-ft. hose and spray.....\$15.00

*We recommend SEMESAN for BROWN PATCH*

## Cast Lawn Rollers

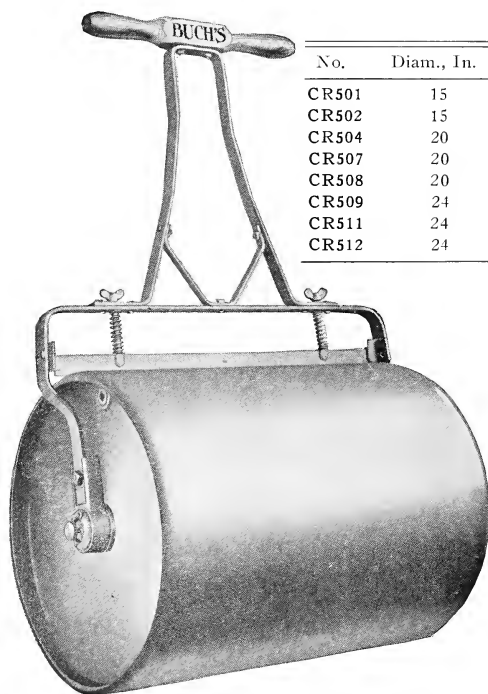
For Lawns, Parks, Drives, Golf Grounds



**Drums**—Of cast five-spoke wheels with ground smooth face and fine finish.

**Bearings**—Steel roller bearings mechanically constructed and run so easy a child can operate.

**Handles**—Of steel with wood hand hold and all firmly braced and neatly finished. Our round edge will not tear up the lawn.



No.	Diam., In.	Lgth., In.	Sections	Face, In.	Wgt., Lbs.	Price
CR501	15	15	2	7½	175	\$20.00
CR502	15	22	3	7½	250	24.00
CR504	20	20	2	10	250	26.00
CR507	20	24	2	12	300	32.00
CR508	20	30	3	10	350	38.00
CR509	24	20	2	10	400	42.00
CR511	24	24	3	8	450	46.00
CR512	24	30	3	10	500	52.00

## Water Ballast Lawn Rollers

Adapted for Rolling Lawns, Golf Courses and Tennis Courts

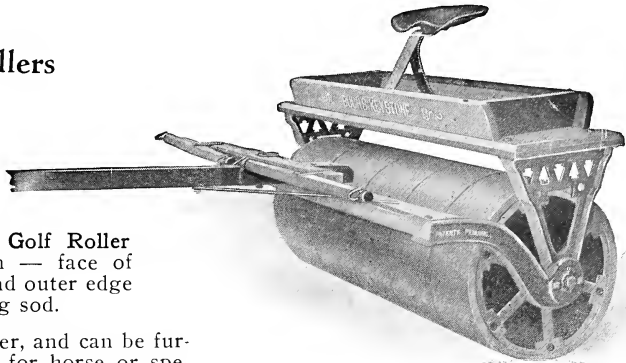
No.	Dia. in.	Lgth. in.	Emp. ty.	WEIGHT		Price
				Filled with Water	Filled with Sand	
WR601	14	24	60	250	400	\$14.00
WR602	18	24	75	330	475	14.50
WR603	24	24	100	440	630	16.50
WR604	24	32	115	590	850	18.50

All rollers F. O. B. Chicago.

Shipped from factory or Chicago stock.

*Don't fail to visit our show-room*

## Golf Rollers



### Our Heavier Type of Golf Roller

Drums are cast iron — face of drum ground smooth and outer edge rounded to avoid cutting sod.

A strong, durable roller, and can be furnished either with pole for horse or special tractor hitch. Specify which is desired.

Exceptionally light in draft and has adjustable balance, which relieves all weight from team under any conditions. Sizes 377 to 382 are special and to order only. Delivery 10 days.

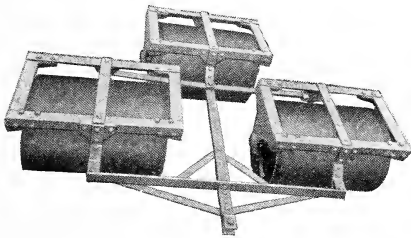
#### Regulation Type

No.	Dia. In.	Lg., Ft.	Sec- tions	Face In.	Wgt. Pounds	Price
GR370	20	5	5	12	1150	\$142.00
GR371	20	6	6	12	1300	156.00
GR372	24	5	5	12	1450	178.00
GR373	24	6	6	12	1700	204.00
GR374	28	4	4	12	1350	170.00
GR375	28	5	5	12	1650	202.00
GR376	28	6	6	12	1950	234.00

#### Extra Heavy, Furnished with Steel Frame

No.	Dia. In.	Lg. Ft.	No. Secs. 12-in.	Weight Pounds	Price
377	32	4	4	2500	\$310.00
378	32	5	5	3000	360.00
379	32	6	6	3500	410.00
380	36	4	4	3000	376.00
381	36	5	5	3500	428.00
382	36	6	6	4000	480.00

## Toro 3 Section Flexible Roller



This perfected flexible roller conforms to the undulations of the turf, and rolls the hollows as well as the high spots, which is not true of the solid rollers which only roll the high places.

The rollers are 18" in diameter and 25" long weighing 500 lbs. each.

These gangs are made in either 3 or 5 gang rollers per gang.

#### Price

Toro 3-section flexible roller, weight 1500 lbs. (F. O. B. Minneapolis).....	\$150.00
(F. O. B. Chicago).....	160.35
Toro 5-section flexible roller, weight 2500 lbs. (F. O. B. Minneapolis).....	250.00
(F. O. B.) Chicago.....	268.00

## Putting Greens Roller



To meet the demand from golf clubs for a substantial, smooth face, light roller for putting greens, this cast drum roller was designed. It has outer drums with round edge and will turn around within its own radius with each drum rolling without cutting the sod. These cast drums are ground perfectly smooth, and are preferable to the wood type.

No. 700—4 feet wide; 4 drums, each 12 inches long, 10 inch diameter; weight, 160 pounds. Price ----- \$30.00  
(F. O. B. Chicago)

*Complete stock on hand at all times*

### Spike Roller—for Greens



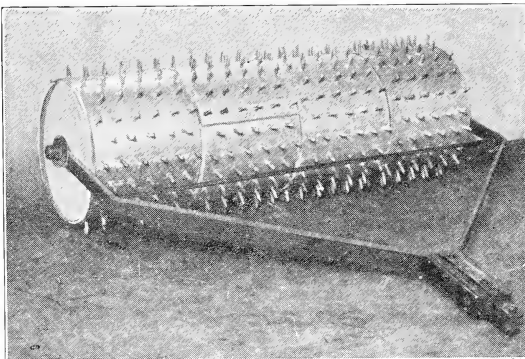
The best and most mechanically perfect spiked roller on the market. Note that this roller comes assembled in three sections. No danger of tearing up turf while turning.

For aerating, seeding and fertilizing the soil.

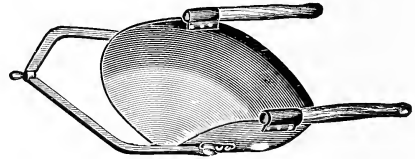
#### DESCRIPTION

Concrete—Weights 285 pounds. Ten-inch diameter. Three sections of ten inches each—making it 30 inches in length.

SR-1 Price, F. O. B., Chicago-----\$50.00



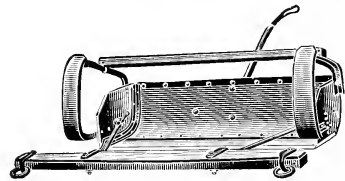
### Road Scrapers



WR1—Road scrapers, solid 10 gauge steel bowl, 30-in. round hardwood handles. Back shaped to prevent dirt going over top while filling. Will work in any kind of soil.

Cap. Cu. Ft.—	Each
7 -----	\$8.75
5 -----	8.25
3 -----	7.75

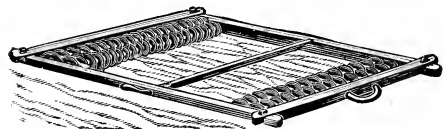
### Back Scrapers



F10R—Back scrapers, cutting edges made extra heavy of superior high carbon steel and can be replaced when worn, blade 12" wide,  $\frac{1}{8}$ " thick, with runners, in  $3\frac{1}{2}'$  to  $5'$  width.

F10R -----	Each	\$30.00
F20R -----	"	28.00
F30R -----	"	26.00

### Meeker Smoothing Harrow



A perfect pulverizing and smoothing harrow and land roller. Grinds up all lumps, leaving soil fine and smooth. The board in the center serves as a leveler and can be adjusted.

MH4—Size $4\frac{1}{2}' \times 4'$ , 46 discs. Each -----	\$35.00
MH3—Size $6'8" \times 6'$ -----	45.00
MH2—Size $8' \times 6'$ -----	60.00

(F. O. B. Chicago)

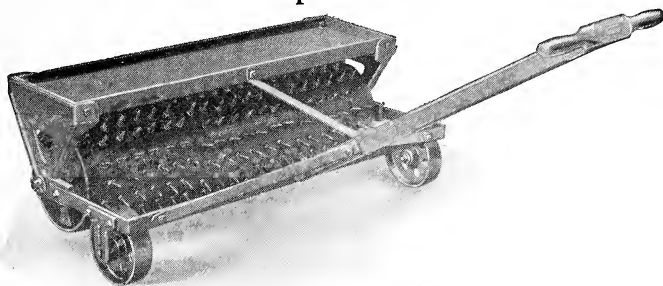
### Spike Roller for Fairways

A heavy roller that will loosen the soil on hard, baked or burned fairways—allowing air and moisture to reach the roots of the grass, thus keeping the fairways green and healthy. Can be drawn by horses or tractor.

SR-2—Weight, 1600 lbs., 14-in. dia., 4 sect., 60 in. width. F. O. B. Chicago-----\$100.00

*Make inquiries on special equipment*

## Hand Spiked Roller



**No. 702.** This roller is built especially for spiking greens by hand, is a 3-section, each section being 10 inches in diameter and 12 inches long. Rolls 30 inches wide. It weighs 190 lbs. Spikes are easily removed.

Price.....\$72.50

**No. 703.** Same as above, only three rollers for fairways, rolls 104 inches and weighs 550 lbs., tractor hitch.

Price.....\$206.00

**No. 705.** Same as No. 703, only weighs 1325 lbs.

Price, F. O. B. Factory.....\$400 00

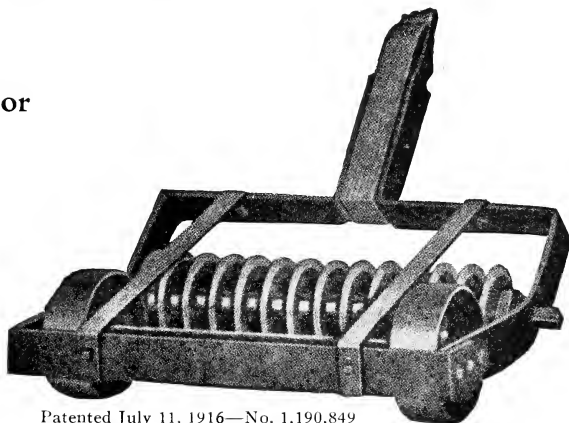
Factory Shipment.

## "Tom Bendelow" Putting Green Cultivator

All-steel construction and finest workmanship.

This cultivator will aerate and enrich the soil; permits seeding during the hot periods, strengthens the root mat, and destroys Crab and other spreading or creeping weeds.

GC-3. Price.....\$50.00



Patented July 11, 1916—No. 1,190,849

## Johnson Push Cart



A great help to the greens-keeper for conveying small mowers, tools, grass clippings and refuse about the course.

Will save the price in labor costs. Constructed to meet the specialized demands of golf clubs.

### SPECIFICATIONS

Box, 8x20x37 in. Hard wood—Painted green.

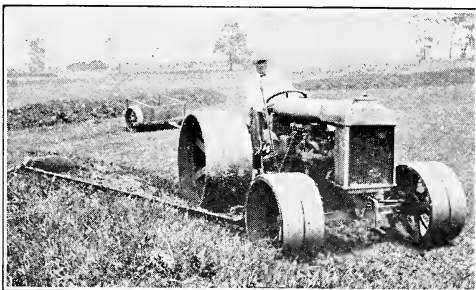
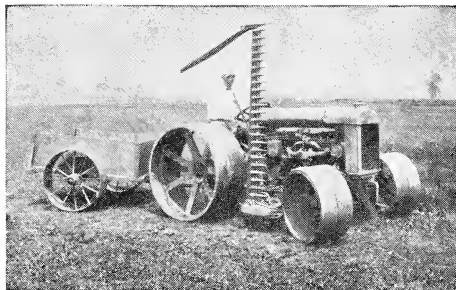
Axle,  $\frac{7}{8}$  in. round. Handle and foot rest.

Wheels, 28 in. dia., 3 in. crown face.

PC-1—Price \$8.00, F. O. B. Chicago.

*All prices F. O. B. Chicago unless otherwise noted*

## Detroit Rough Mower For Fordson Use



Also as shown above for cutting side of bunkers. Will save labor of four teams, wear and tear on revolving reel mowers, cut 50 acres of rough as low as 1 inch in height in one day. Extreme simplicity. No change in Fordson necessary, no changes on worm gear, no tractor oil to drain. Assembled in 30 minutes. Flexible in all capacities, cutting bunkers, or hills and can be set up as shown without impairing use of Fordson. Cutter bar always in plain view of operator, mowing bar 6 feet long. Coil spring in front drag bar absorbs shocks when running into stumps. Power taken directly from the pulley gear—mower runs at motor speed, not wheel speed. All gears and shafts automatically oiled from Fordson. It fulfills a most valuable service to golf courses, race tracks, baseball diamonds, polo grounds, sub-divisions, parks and cemeteries. Further circular information on request.

DM-6—Two speed transmission ball bearing. Two knives furnished.....\$165.00  
F. O. B. Chicago, Illinois

## Wide Golf Course Wheels for Fordsons

The wide, smooth-faced wheels with sod puncher pins in each wheel provide necessary traction and at the same time improve the fairway, the green approaches and lawns. Rear wheels are 19 inches wide. Front wheels are 14 inches wide. Price, 4 wheels complete.....\$120.00

Shipping weight—800 lbs.

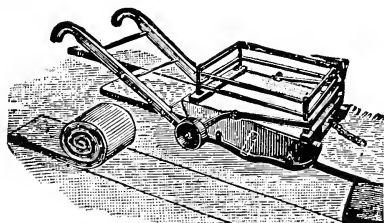
WR—Two rear wheels (less pins).....\$73.00      WF—Two front wheels.....\$55.00  
WRP—Sod puncher pins, per 100.....\$10.50  
F. O. B. Chicago, Illinois

## The JOJ Sod Cutter

This machine is meeting with high endorsement among greens keepers and others, and has proved to be a great success. Operates at a low minimum of cost. Cuts the sod of uniform width and thickness, in any length, so that it is particularly adapted to giving solidity to slopes in cuts and on embankments, working equally well on level or uneven surface, cutting both ways with the land, and leaving no sod uncut.

One machine will cut from 30,000 to 40,000 square feet per day, thus doing the work of forty men.

No. SC-1—Price, F. O. B. Chicago.....\$34.00



## Horse Lawn Boots

For Use on Golf Links, Tennis Courts and Fine Lawns

The sole is hardened, filled with steel rivets and made waterproof. The construction is entirely with rivets—no stitching whatever. Fastened to the horse's foot, not to the ankle, giving free action and no chafing.

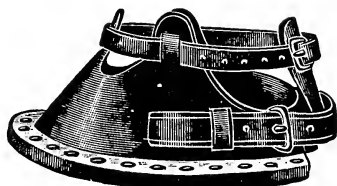
No. 2 boot measures inside (extreme width) 5½ in. Correct size for No. 2 horseshoe.

No. 4 boot measures inside (extreme width) 6½ in. Correct size for No. 4 horseshoe.

No. 6 boot measures inside (extreme width) 7 in. Correct size for No. 6 horseshoe.

No. 4 size generally used. Larger sizes to order.

Per set of four.....\$16.00



*Wire your orders, our expense*

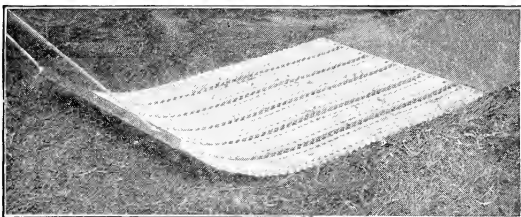


## Flex Mat Top Dressing Drag

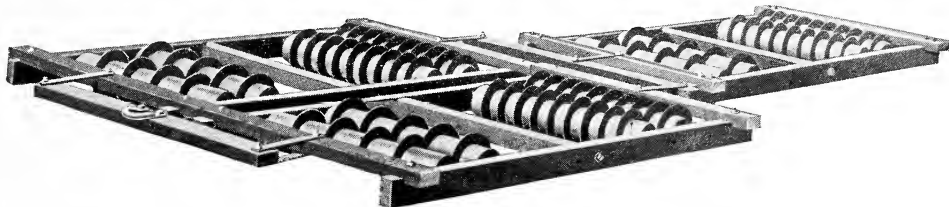
(Patented)

After floating-in top-dressing, it should be worked down around crown of grass. This can best be done by the use of our dressing mat. Takes off surplus and trues the green.

FM1—28x48 in., each.....	\$ 4.25
FM3—30x60 in., each.....	5.75
FM2—4x6 ft., each.....	11.50
FM4—6x10 ft., Fairway Dandelion Drag, same construction. Tractor hitch.....	22.00



## The Meeker Discing Machine



Designed for use on golf courses, park surfaces, and private estates where the grass either is not growing on account of the roots being choked and parched, or where it is desired to reseed without going to the expense and trouble of entirely tearing up the sod by plows or other heavy implements.

The machine, complete, has three sections, but the sections can be used as a single unit.

Each section frame measures 6' 8" long x 3' wide, and each section has four sets of rollers, with 30 steel cutting wheels, 8" in diameter, which can be set at a slight angle where it is desired to scarify the turf for reseeding, or can be set straight where the intention is merely to cut the runners, or to break up the grass to aerate the roots. Where the soil is hard, the machine is capable of being burdened up to 1,000 lbs.

MD-3—Price complete (F. O. B. Chicago), Three Sections.....	\$90.00
MD-1—Price, Single Sections (F. O. B. Chicago) .....	30.00

## Imported Scotch Chain Harrow

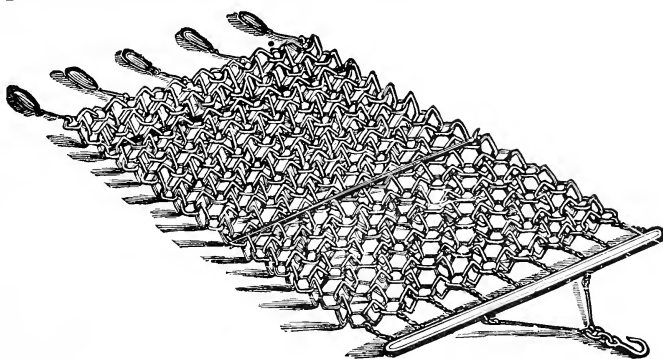
Greenskeepers on golf courses state it is the most valuable implement on the market for surface pulverizing and leveling. It is far superior to the average disc or tooth harrow, as it not only pulverizes the soil thoroughly, but also fills in all inequalities in the ground, thus insuring a smooth, even surface for seeding grass.

As the final surface smoother on grading jobs, it is without an equal, for it obliterates all motive power marks completely. This implement has been in use for years on race tracks, driveways, golf courses, etc., for smoothing out footprints and ruts.

The heavy links are fashioned by skilled workmen in Scotland from solid wrought iron and are therefore very durable. When not in use it may be rolled up completely, so as to occupy a minimum amount of storage space.

1—MEDIUM SIZE, 6'x7½', weight 170 pounds.....	\$37.00
2—LARGE SIZE, 7½'x7½', weight 220 pounds.....	47.00

F. O. B. Chicago

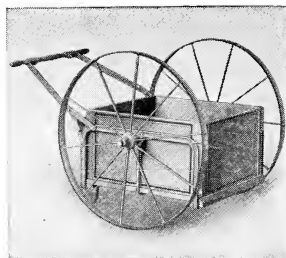


*We ship direct from stock*

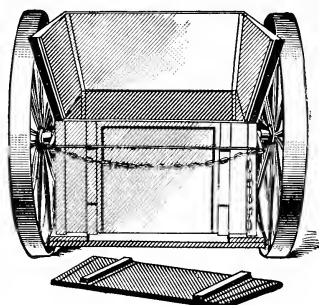
## Steel Hand Cart



BC-1



BC-2

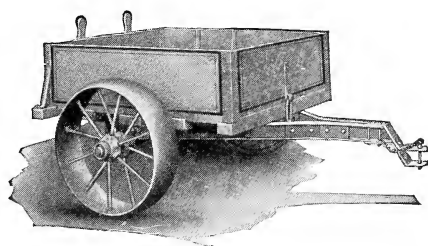
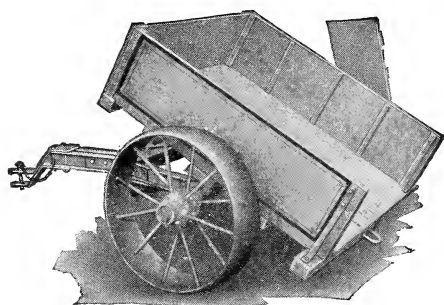


BC-3

An exceptionally strong cart for hand work. Steel wheels are 36 inches high and are made with either 2-inch or 3-inch tires, as desired. Supplied with platform, also with box or with hopper sides; or may be had complete with all equipment.

BC —With platform, 2-inch tires.	Each.....	\$ 9.95
BC1—With platform, 3-inch tires.	Each.....	11.45
BC2—Box extra .....		3.55
Hopper sides extra .....		4.50
BC3—Complete with platform, box and hopper sides; 3-inch tires (i.o.b. Chicago).	Each.....	19.50

## Johnson Dump Cart Improved Model—All Purpose



30-inch diameter. Hardwood construction on box. All steel chassis. Front and rear hitch. Angle iron bound—half round iron supports welded to ¾-inch bolts through bottom sill. 46x54x16—Capacity 21 cu. ft. filled flush. Will hold over a yard overloaded. An exceptional value—with iron wheels (i.o.b. Chicago).

DC-1 .....		\$75.00
Side boards 10 inches high. Extra.....		9.00

## Pyrene Fire Extinguishers

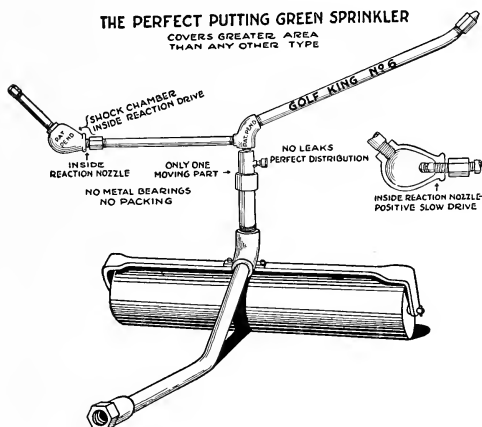


Pyrene is noted for its efficiency as a fire extinguisher. We can furnish any size from 1 pint up, also recharges for all sizes. One of these should be in every building on a golf course in order to check fires when they start.

1 quart size as shown with bracket .....		\$12.00
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*Articles cataloged have been selected on quality*

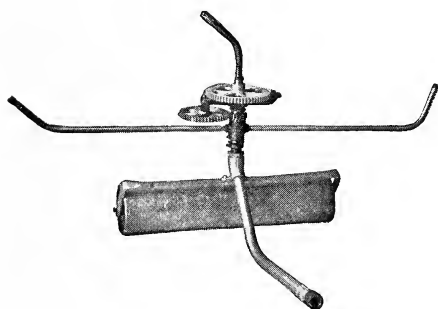
## SPRINKLERS

THE PERFECT PUTTING GREEN SPRINKLER  
COVERS GREATER AREA  
THAN ANY OTHER TYPE

Jr. size on roller stand.....	\$11.00
Jr. head only.....	7.50
For pressures up to 25 lbs.	
Standard size on roller.....	\$16.00
Standard head only.....	10.50
For pressures above 30 lbs.	
Oversize on rollers.....	\$21.00
Oversize head only.....	15.00
For fairway.	

All Sprinklers F. O. B. Chicago.

## ON ALL SPRINKLERS—STATE SIZE OF HOSE USED

Buckner  
No. 303 Sprinkler

Long arm covers 3600 to 4900 square feet on pressure of 40 to 60 pounds. Very efficient when wind is a factor. One inch connection.

Price, with roller stand.....\$16.00

## Golf King No. 6

This BUCKNER Sprinkler is the last word in greens sprinklers and will cover a greater area with more water than any other sprinkler we have tested. It is ideal for both fairway and putting green work, has slower motion and will cover greater area than any other sprinkler. Will cover 90 to 160 feet diameter on pressure 40 to 100 pounds, distributing uniformly 10 to 48 gallons per minute over this area, without run-off or flooding. It has been thoroughly tested and approved by the best known architects and greenkeepers.

This sprinkler is by comparison with other sprinklers that have gone before, a most remarkable sprinkler. It is revolutionary, as it is perfect in action under all conditions and will last longer than any other sprinkler ever designed.

No more delicate gears, triggers, flappers, vibrators, jumping jiggers or fast whirling freak parts to wear out or get broken off. Such contraptions work fine for a while, but experience is the best teacher and we have discarded the spectacular. Save money, labor and grief. Order GOLF KING No. 6 for either fairway or putting green work. State size of hose and amount of pressure.

## Buckner Golf King No. 2

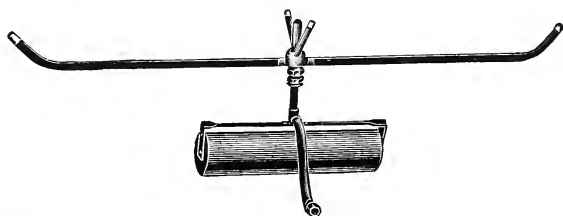
(at Left)

Another popular sprinkler of the geared-head type. Positive in action, with good distribution.

Price, with roller stand.....\$23.00

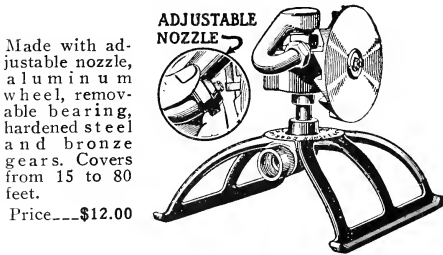
Price, with sled stand..... 20.50

(F. O. B. Chicago)

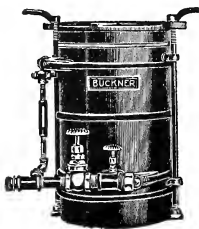


Prices subject to change

## Double Rotary Sprinkler



## Automatic Fertilizer Distributor



For distributing sulphate of ammonia, Semesan, etc. Made of California red wood, the only material which will withstand the action of corrosive sublimate. Connects to a hydrant and sprinkler, and will dilute and distribute evenly any soluble fertilizer or insecticide.

Price-----\$45.00  
(f.o.b. Chicago)

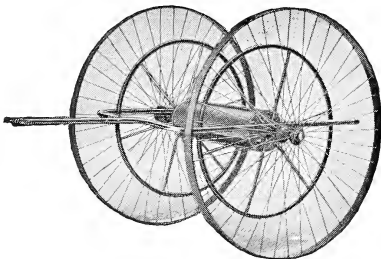
## Golf Water Hose



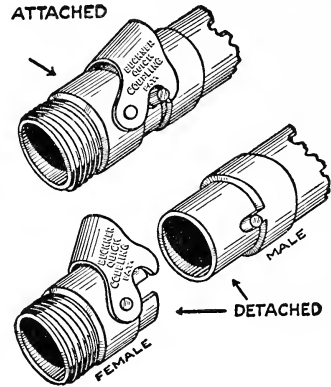
Boston Bulldog Hose is without an equal for golf course work due to its rugged construction and honest workmanship. We have sold half a million feet of Boston Hose and know how it stands up. J. Oliver Johnson, Inc. stands squarely behind this hose.

Boston Hose is made in all sizes, in both wrapped and moulded, in any lengths.

Due to market fluctuations prices quoted on request.



## Buckner Quick Hose Coupling



No screwing or unscrewing of the hose, coupling instantly made. Will not leak air or water. Use one male coupling at each hydrant and one female coupling for each hose.

## Price List

No. 1, for 3/4" hose:	
Female part	60c
Male part	30c
Complete coupling	90c
No. 2, for 1" hose:	
Female part	\$0.80
Male part	.40
Complete coupling	1.20

## Rain King Hose Nozzle



This is the only hose nozzle without moving parts to wear, clog, or give trouble. The different sprays are obtained by a new and unique principle. Throws more water farther than any other hose nozzle made.

Price-----\$1.25

STOLON SPRAYERS—SEE PAGE 41.

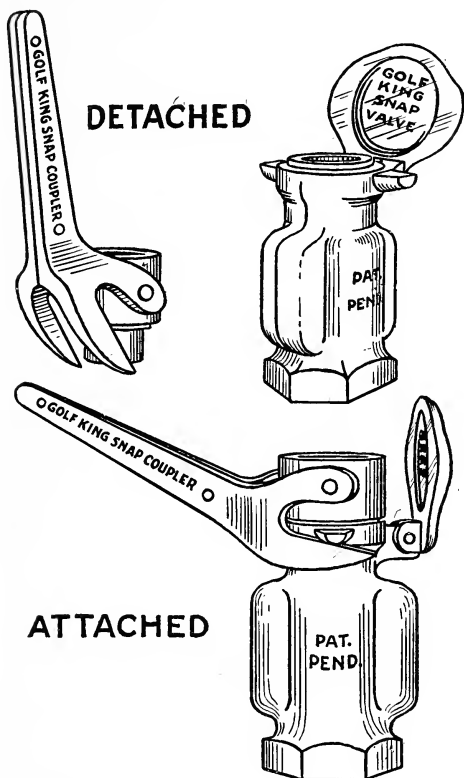
## Golf Course Hose Cart

A happy medium. Suitable for a large quantity of small hose or a small quantity of large hose. Tubular Steel Reel, Frame and Tongue. Steel Wheels with 3" Tires.

Numbers of Reel	HC90	HC100	HC110
Height of Wheels in Inches	36	36	38
Extreme Outside Width in Inches	30	32	37
Weight of Carts, complete, pounds, bundled for shipping	75	90	100
Capacity of 3/4-inch 3-ply Rubber Hose	500 ft.	600 ft.	800 ft.
Capacity of 1-inch 4-ply Rubber Hose	200 ft.	300 ft.	400 ft.
Price (Factory Shipment)	\$26.00	\$30.00	\$42.00

See Page 23 for Johnson's Fertilizer Distributor

## Golf King Automatic Valve



Designed for Hoseless Systems. Self closing under any pressure. Rigid Quick Coupler. No leaks or wash when attaching or detaching. Connection is instantaneous.

Buckner originated the Hoseless System of golf course irrigation and the rigid quick coupling for connecting sprinklers and hose to systems instantly. And now we have the AUTOMATIC GOLF KING VALVE and QUICK COUPLER. This is a self closing valve allowing no leakage on hillsides or elsewhere. Effects great saving in expense by eliminating many control valves and service leads, as well as all hose and other upkeep cost.

The system is invisible and permits the use of one or any number of sprinkler at any point on the course without running around to open and close valves. Simply snap the sprinkler or the hose—where hose is used—to the valve in five seconds. This automatically opens the valve. Disconnect the sprinkler and valve automatically closes. No valve boxes required. No obstructions or hazards in the fairway. Mower or roller passes over without damage.

Valve only .....	\$4.25
Quick Coupling only .....	3.25
Complete Valve & Coupling.....	7.50

F. O. B. Chicago

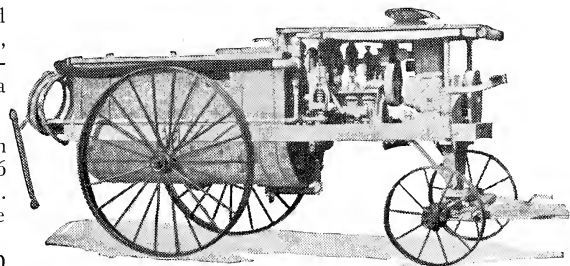
## Golf Course Spray Outfit

A complete spray outfit with from 100 to 400 gal. capacities; complete with tank, trucks, motors, hose and nozzles. May be used for fertilizer, brown patch remedies and for spraying fairways and rough, also as a tree and shrub sprayer.

No. 604—100 gallon tank with agitator, 3 H. P. engine, Pump 6 gal. per minute at 300 lbs. 25 ft. of hose with spray gun. 6 inch wide tires. All complete.

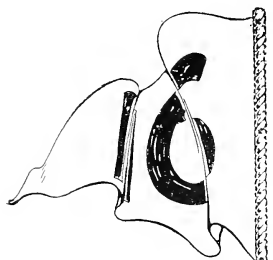
Price, factory shipment.....\$300.00

Write for other sizes and prices.



*Complete stocks at all times*

## The Standard Greens Accessories



The Standard Pole is constructed from a special strong light weight seamless tube fashioned into a beautiful spiral design which increase the strength. Tube is  $\frac{3}{4}$ " in diameter and 8 ft. long, is light in weight, but strong and stiff enough to stand the most severe usage. Attractively finished with four coats of the highest grade pyralin laquer over a special non-rusting zinc galvanizing.

Furnished in red and white, or black and yellow.

The ferrule at bottom is cast aluminum to fit the Standard  $\frac{1}{8}$ " hole rim socket. May also be furnished for 1" socket.

**SP1, Standard Poles, each.....\$2.00**

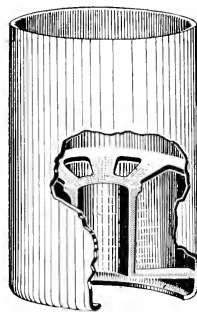
## Everbright Tee Marker



Made of aluminum and cast in one piece, pin and top. Markers are self-polishing, never rust and never require painting.

**ST1. Ever Bright Tee Markers, per pair, \$1.20**

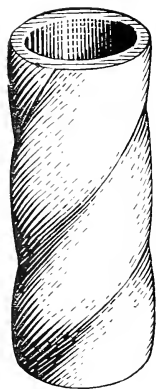
## Standard Hole Rims



These rims are cast in one piece from Aluminite and are rustproof. The re-inforcing construction on the inside make them practically indestructible. Inside and outside of shell perfectly smooth and they conform precisely to U. S. G. A. specifications. The standard size is for  $\frac{1}{8}$ " poles, but may be had with a 1" socket also.

**SR1. Aluminite Rim, each.....\$2.00**

**SR2. Same rim only in Cast Iron, each... 1.00**



*Special information cheerfully furnished*

## Self-Closing Waste Receptacles

Order by Catalog Numbers—Always Specify Finish

## PRICE LIST

Cat. No.	Size of Base	Height Overall	Approx. Shipping Weight	Capacity in Gallons	Grey or Green	White Enamel	Grained Mahogany
5	9"x9"	18 5/8"	12 lbs.	4 1/2	\$5.50	\$5.95	\$7.75
10	11 1/2"x11 1/2"	24 1/4"	19 lbs.	9 2-5	6.50	7.00	9.25
15	11 1/2"x11 1/2"	41"	35 lbs.	23	9.25	10.00	13.00
30	16"x16"	34 3/4"	45 lbs.	27	10.00	11.50	14.50
50	21"x21"	47"	83 lbs.	65	18.50	20.50	24.00
60	21"x21"	48 1/4"	112 lbs.	65	22.00	Green Only	
60A	Same as No. 60 but with Advertising Sign Frames				25.75	Green Only	

## Standard Equipment

No. 5 equipped with paper bag, 25 furnished with each Receptable.  
 No. 10 equipped with paper bag, 25 furnished with each Receptable.  
 No. 15 equipped with a removable galvanized can.  
 No. 30 equipped with burlap bag, 1 furnished with each Receptable.  
 No. 50 equipped with burlap bag, 1 furnished with each Receptable.  
 No. 60 equipped with burlap bag, 1 furnished with each Receptable.



## Lewis Golf Ball Washer

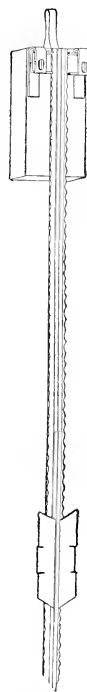
The most popular place at every tee centers around the *Lewis Golf Ball Washer*. Golfers and caddies like to see the muddy, grass-stained ball come out of the *Lewis Golf Ball Washer* gleaming white — and what's more, no matter how many times the *Lewis Washer* is used, the paint doesn't come off. A word to the wise, use soap. Under no condition should sand be used.

## Most Clubs have the LEWIS

... at every tee. The members of your club deserve this pleasant economy.



## Lewis Tee Stake



## PRICES

1 Prepaid in U. S. A. (trial offer) .....	\$5.25
2 to 10 at F. O. B. Chicago .....	Each 6.00
11 to 20 at F. O. B. Chicago .....	Each 5.50
Stake only as shown on right.....	Each 1.60



Complete stock of Washer parts carried in Chicago

## Mobo Soap

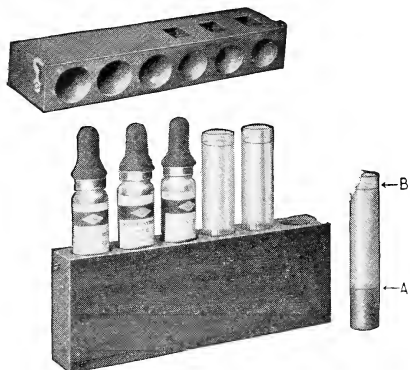
Recommended for this ball Washer

Price: 1 lb. can.....	\$ .40
5 lb. can.....	1.50

5 Feet Long.

Complete stocks at all times

## Kenny Soil Testing Set



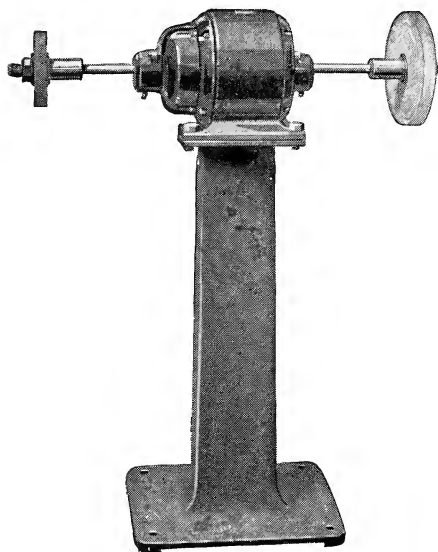
This soil testing outfit will determine whether your soil is acid or alkaline, and the degree. Very simple and tests can be made in a few minutes. Charts with the set indicate the soil preference for all common plants, shrubs and grasses. Every green-keeper and gardener should have one.

**KT1—PRICE, POCKET SIZE .....\$5.00**

THE MORGAN SET is a little larger and more complete and allows a greater latitude of experimental work. Especially useful for Colleges, Nurserymen and Florists.

**KT2—Price, complete with charts.....\$10.00**

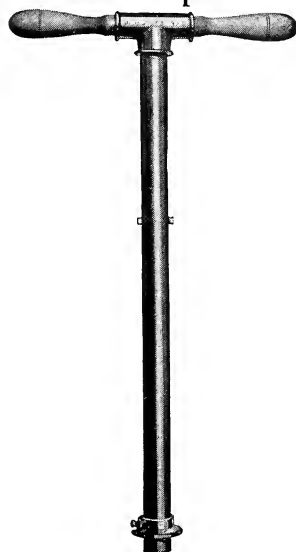
## Electric Polisher and Buffer



For cleaning and polishing clubs. The best tool of its kind we know of. Comes complete with stand, motor, 2 buff wheels and Tri-poli. Extra attachments may be obtained.

**EP1—Price, complete  
F. O. B. Chicago .....\$97.00**

## Sod Transplanter



This tool is especially adapted to transplanting creeping bent on your green or fairways. It can also be used for removing large weeds, ant hills, etc., replacing them with good sod. It will remove 50 plugs a minute.

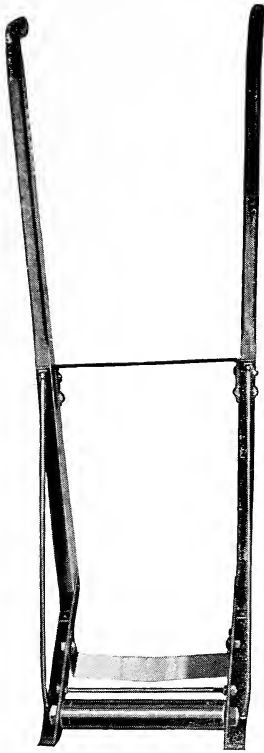
**EST1—Price .....\$15.00**



## Hand Sod Cutter

This is an easily handled sod cutter by which one man can cut 1,000 square yards of sod per day. Cuts any thickness desired. Operates by sharp shoves of the foot.

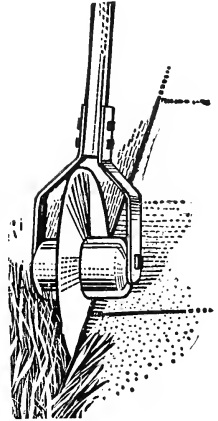
SC2—Price, F. O. B. Chicago.....\$25.00



## Pines Sod Edger

A handy tool for opening up sod and for marking off before lifting sod. Can't be beat as an edger.

SE1—Price .....\$1.00



## Bulk Wooden Tees



We can furnish a good grade of wooden tees of a standard make in bulk.

WT1—Price, per 1,000, red or yellow....\$3.00

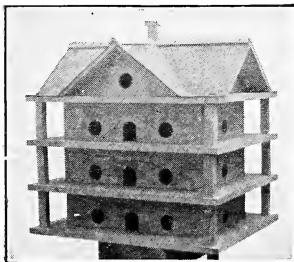
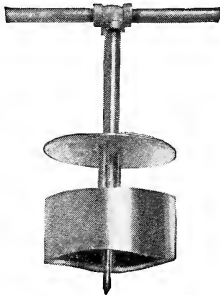
## Johnson Turf Repairers

Circular. Full welded job. For repairing or replacing patches of weeds or "brown patch."

TR6— 6-in. diameter, each .....\$9.00

TR8— 8-in. diameter, each .....11.00

TR10—10-in. diameter, each .....13.00



## Martin House

Two or 3 story and attic—3 story has 28 compartments; easily taken apart and cleaned. Size, 22x27x21. Made of Oregon fir. Porch and columns all sides. Ready for painting.

A 4x4 post, 14 feet long, and so made that house is easily taken down, may be obtained also.

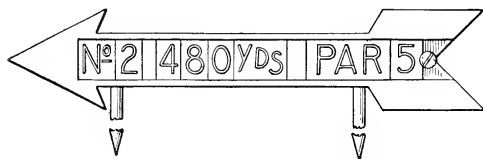
MH1—Price, 3-story house, F. O. B. Chicago.....\$14.00

MH2—Price, 2-story house, F. O. B. Chicago..... 11.00

MH3—Price, 14-ft. post with base, F. O. B. Chicago.. 9.75

*Orders Shipped same day as received*

## Johnson's Tee Arrow

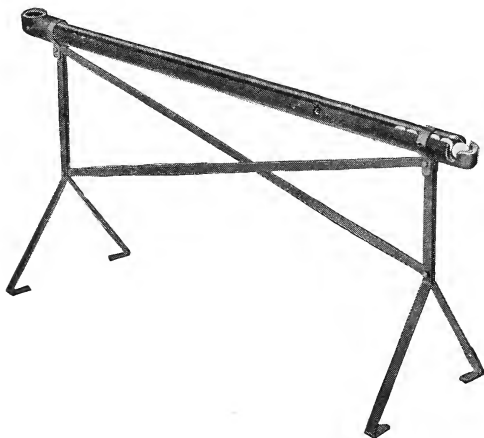


The Johnson Patented Tee Arrow fills a definite need, since many clubs have abandoned the Tee stands. Arrow is about 14 inches long and has removable letters and figures which may be easily changed to suit the short and long tees on a hole. Arrows set at an angle with the turf, so are easily read. Finished in baked enamel, arrows cream, raised letters in black.

In ordering be sure to give number of hole, yardage and par and any extra numbers you may wish.

JTA1—Price, per pair, complete.....\$1.75  
Extra figures, each ..... .05

## Johnson's Ball Rack

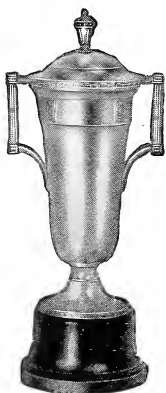


This rack is designed for the First Tee. Balls are placed in upper end and roll to lower end, indicating the order of teeing off.

Tube is closed except for slot, which shows position of ball. Nicely enameled in green, with black trim. A necessity for every course.

BR1—Price, each .....\$10.00

## Prize Cups and Trophies in Silver Plate



In the design and construction of these trophies every consideration is given to pleasing the ultimate owner.

In construction only the best quality materials are used and the workmanship is of the highest standard obtainable. Other designs upon request.

Also made in solid silver. All cups may be obtained with or without pedestal base.

Trophies including ash trays, plaques, shields, beverage mixers, can be furnished promptly.

Write for special trophy catalogue and prices.

No. 310. Gold Lined. Height: 8".....\$9.40    11".....\$13.50    14".....\$18.35

*Wire your order, our expense*

**Tee Arrow**

(Porcelain Enameled)



Porcelain Enameled Tee Arrow with the number of the hole, yardage and par.

Arrow is of cast iron 15 inches long with bath tub enamel in gray with black figures.

In ordering enclose score card.

TA2 price: 9 pair.....\$40.00  
18 pair..... 75.00

**Cocoa Tee Mats**

IMPORTED Cocoa Mats the best obtainable. These mats are very popular on public courses and on grassless tees. They give the same lie as a grass tee and wooden tees may be used.

When dressed with sand are far superior to grass or clay tees.

CM1—4'x6'.....\$15.00 CM3—5'x6'.....\$20.00  
CM2—5'x5'..... 16.00 CM4—6'x6'..... 22.00

**Dip Nets**

DN1—Made of cast iron to be fastened to a long pole. Light in weight and easily handled.

Each .....\$0.50

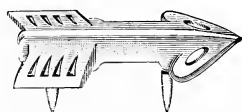
DN2—Wire dip nets made of heavy galvanized wire. Each.....75

**Tee Towels**

TT1 — Linen  
Crash un-  
bleached Tee  
Towels 14x17.  
Have 1 grom-  
met.  
Ea. ....\$ .18  
Doz. .... 1.90  
Gross .... 20.00

TT2—Heavy ribbed white towels with one grommet.

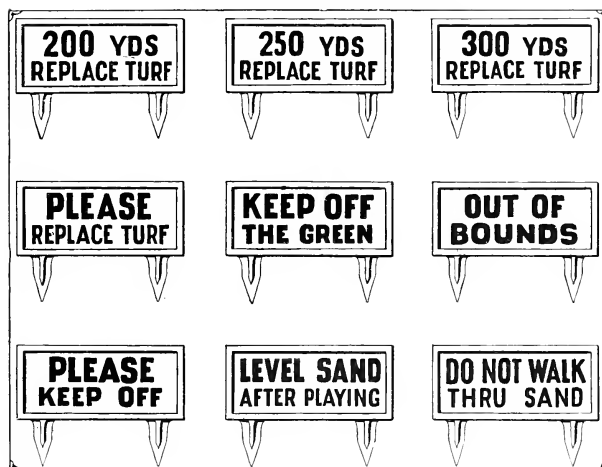
Each .....\$ .25  
Doz. .... 2.75  
Gross ..... 31.00

**Tee Arrows**

Used on the Tee to designate where ball should be teed up and played. This Tee Arrow does not kill the grass and is easily changed as required.

Size of Arrow, 7 inches long. Finished in white.

TA1—Tee Arrow, Each .....50c

**Golf Course Markers**

GM1—Markers as shown, 14 x 4½" finished in white with black letters. Each.....\$1.25

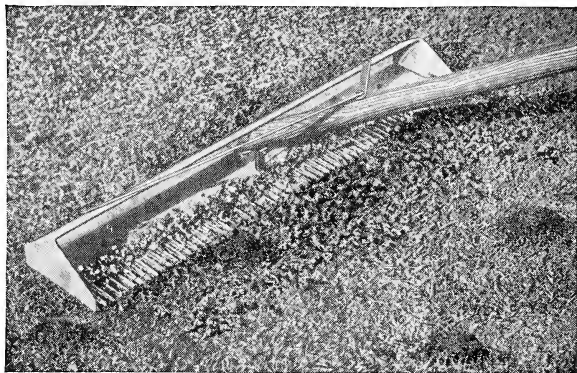
With ⅝ x 24" steel rod instead of points, each.....\$1.75

*All orders shipped promptly*

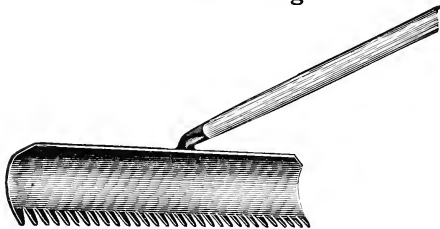
## "Early Bird" Worm Cast Rake

Unique tool, simple and effective. Gets every worm cast, dry or damp—rapidly, easily; also all other litter. Can't injure greens. Is excellent for leveling top dressing and as a comb before cutting grass, getting up sprangly branches. Cleans 30-inch path perfectly at a fast walk. Average course equipment, 6 rakes.

EB-1—Each .....\$8.50



## Hudson All-Purpose Rake Self Cleaning



The All-Purpose Rake is unequalled for removing yellow dandelions. When it is pulled across the lawn, the stems, leaves and blossoms are wedged between its teeth and easily pulled out. It will pick up the acorns, pebbles, small twigs, etc., which an ordinary rake will not touch, and will clean the lawn of cut grass and dead leaves in better shape than is possible by any other means. It is self cleaning. A single backward stroke clears the rake.

Handle is polished hardwood, 5 feet long. Curved so as to roll the rubbish before it. Weight 3 pounds each.

PE16—16 inch All-Purpose Rake, each.....\$0.80

PE20—20 inch All-Purpose Rake, each..... .90

## Johnson Golf Barrow

Extra Strong, Roomy Wheelbarrow—  
Special 3 inch Tire, Wood Wheel

GB No. 1—Large Size

Body—30" long, 24" wide in front,  
25" wide in back, each.....\$10.00

GB No. 2—Medium Size

Body—28" long, 20" wide in front,  
24" wide in back, each.....\$9.00



## J. O. J. Sand Trap Rake

For Golf  
Course  
Traps

Invented by  
well-known  
professional.  
Ridges the  
sand, compels  
the use of an  
iron instead of  
putter. Im-  
proves appear-  
ance of traps.

Price,  
each.....\$3.00



## Mole Trap

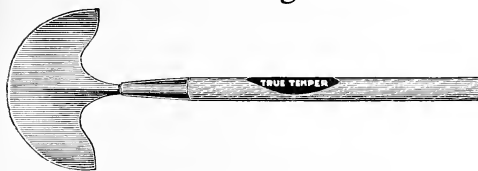
Reddick mole traps are positive killers.

For gardens, farms, beautiful lawns, cemeteries, golf courses, colleges, public parks, these traps are indispensable.

MT1—Price, each .....\$0.80

*Don't fail to visit our show-room*

## Turf Edger



A well made tool for trimming and cutting sod.

TE1—Each .....\$1.25

## Stolon Sprayers

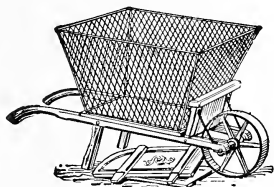


The best sprayer for Stolons. Will not wash away top dressing. Solid cast brass.

SP1—Price for  $\frac{3}{4}$ " hose.....\$1.00

SP2—Price for 1" hose.....1.50

## Wheelbarrow Leaf Rack

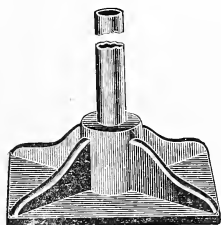


Made of heavy wire will hold about ten bushels.

Easy to put on any wheel barrow.

LR1—Price, each .....\$7.00

## Sod Tamper



We make these Tamperers in three sizes and weights. Complete with heavy pipe handles. Very useful on the course.

ST1—8 x 8—  
20 lbs.....\$3.50

ST2—10 x 10—  
24 lbs.....\$4.25

ST3—14 x 14—  
30 lbs.....\$5.25

## Bamboo Whipping Poles

20 to 22 ft. long.

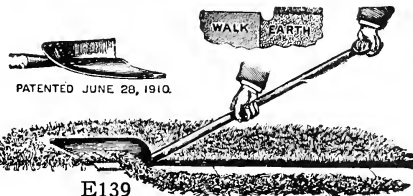
Dozen lots, each.....\$0.35

2 Dozen lots, each......30

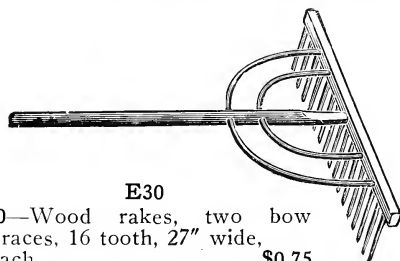
4 Dozen lots, each......25



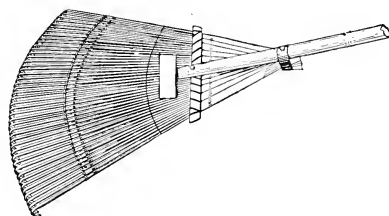
E90—Sod lifters, 9" polished steel blade. D handle  $2\frac{3}{4}$  ft. Length over all, 4 ft., each.....\$2.00



E139—Edge trimmers, for sidewalks and traps. Plows a clean "V" shaped trench one inch deep, each.....\$1.50



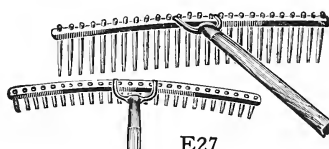
E30—Wood rakes, two bow braces, 16 tooth, 27" wide, each .....\$0.75



## Bamboo Rakes

Has 44 teeth, 18 inches wide, 5-foot handle. Weights 16 oz.

BRI—Price, each .....\$0.35



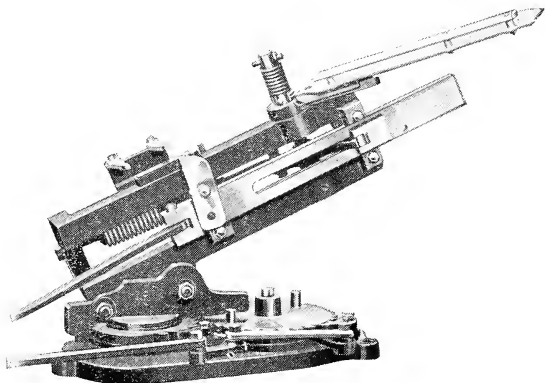
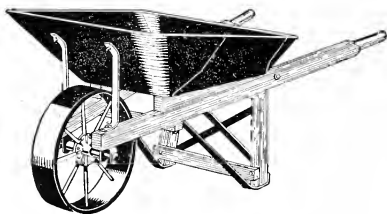
E27—Wood lawn rakes, "Ole Olson," straight or bent head, 26 teeth, 23" wide, each .....\$0.90

## Wide Tread Wheel Barrows

This barrow constructed sturdily with steel box, well balanced, easily dumped. Note the 4" tread on the wheel which means that the planks may now be dispensed with. Turned edges on wheels mean no marks on turf. Prompt shipment f. o. b. Chicago.

WTB-1—Price each .....\$10.00

WTB-2—Extra wheels fit old barrows, each.... 4.00



## Black Diamond Traps

**AUTO ANGLE.** Automatically changes angles, easily set for single or doubles, positive in action.

Price, each.....\$90.00

**SIMPLEX.** Same high quality as the Auto, only has not the Auto Angle feature.

Each .....\$55.00

**TARGETS.** Per bbl. (594) \$3.65



## United States Flags

### DOUBLE WARP WOOL BUNTING

Seams are double stitched. Large sizes above a 9 x 15 ft. flag finished with strong canvas heading and manila rope. Full complement stars sewed on both sides of the field on all flags.

Size ft.	Each	Size ft.	Each
4 x 6 .....	\$5.00	8 x 12 .....	\$18.00
5 x 8 .....	8.00	10 x 15 .....	27.00
6 x 10 .....	11.00	12 x 20 .....	43.00

Other sizes with prices on application.

## Club Burgees

Made of Navy Brand double warp wool bunting in three styles: No. 1 Plain without border; No. 2 With plain border; No. 3 Star border as illustrated. Ten letters included at these prices:

Length Feet	Price No. 1 & 2	Number 3
10	\$11.50	\$13.00
12	15.00	16.50
15	21.50	24.00
20	29.00	34.00
25	43.00	51.00

Other sizes and prices on application also made in cotton bunting at a much lower price.



*Wire or phone your orders at our expense*

## Johnson's Golf Course Equipment



### Distance Markers

Cast iron-steel stakes. Sign in dazzling white, raised letters in crimson, stake in green, Duco finish, size  $4\frac{1}{2}$ "x8", stake 36" long. From 100 to 500 yards by 25 yards.

DM1—Each .....60c

### Foulis Swivel Flag Support



No. FS2—(Pat.)

FS2—Foulis Swivel Flag Support, for oblong flags. Will not wrap around pole. Revolves in wind. Constructed entirely of brass. Cannot rust.

Support only, each.....75c



### Tee Ball

No. T14

T-14. Made of Hardwood, White enameled. Will not split.

Per pair .....50c

### Caddy Badges



No. C129



No. C131



No. C300

### PRICES

Quantity	Nickel Plate	Brass	Quantity	Nickel Plate	Brass
12	\$ 9.00	\$ 8.00	100	\$23.00	\$19.50
25	11.00	9.50	200	43.50	36.00
50	14.50	11.00	300	57.50	48.00
75	19.00	15.00	500	82.00	68.00

Made to order with name of club or otherwise. Submit sketch with order.

Delivery one week. Cash must accompany order.

Additional Shapes and Individual Designs on Application.

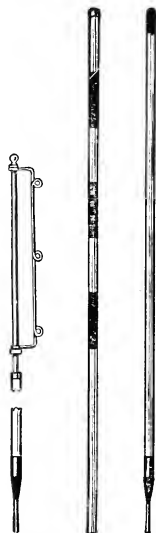
*Make inquiries on special equipment*

## Johnson's Putting Green Accessories



**Johnson-National Tee-stand.** The neatest and most compact. Stand is light in weight and three point support gives stability. Water pail can be emptied for cleaning by turning upside down. Painted green and white. No bolts used in construction. All joints welded.

Set of 9-----\$ 90.00  
Set of 18-----175.00



FS2J JP1 SP2

**JP1. Johnson's Greens Indicator Flag Pole.** 8 feet in length, tapers at top to  $\frac{1}{2}$  inch and at bottom to 1 inch. Air seasoned ash painted white with either red or black stripes. Will not warp.

Plain base. Each ..... \$0.75

Any size brass ferrule base.

(State size) Each ..... \$1.00

Spiked base Each ..... \$1.00

**SP2. Steel Flag Pole.** Constructed of seamless steel tubing, 8 feet in length,  $\frac{7}{8}$  inches in diameter. Closed top, bottom swaged to  $\frac{3}{8}$  inch spike. Baked enamel finish in red with black tips or black with red tips. Light weight, will last forever. Winner Swivel easily attached. Price, each ..... \$1.50

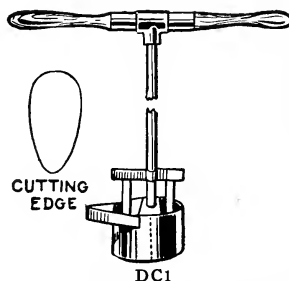
**FS2. Foulis Swivel Flag Support.** Made of brass. Flag will not wrap around pole. May be attached to any pole by drilling a  $\frac{5}{16}$  hole in pole.

Price, each ..... \$0.75

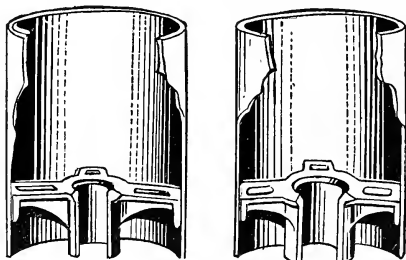
**WSS. Winner Swivel.** Made of brass. Will attach to any pole. Flags will not wrap around pole. Each ..... \$0.40



**WSS—Winner Swivel.** Will fit any flag pole. Each ..... \$0.40



**CDC1. Divot Cutter. "Harry Collis."** For repairing and renovating tees, greens or fairway; can be used for putting bent patches into tee or greens. Size 3 inches by 5 inches, each.....\$9.00



Johnson's Rustless Hole Rims

**HR1. Hole Rims.** Constructed of seamless steel tubing; webs steel cast and spot welded to rim. Absolutely indestructible. Measurements precisely conform to U. S. G. A. rules. Sockets made special to fit Johnson or Seamless Steel Poles. Plain, spike or ferrule base. Give size of pole base.

HR1— $\frac{3}{8}$ " socket, each ..... \$1.00

HR2— 1" socket, each ..... 1.00

HR12—Special  $1\frac{1}{2}$ " socket, with large hole for a bamboo pole, each..... 1.00

**HP1. Hole Rim Puller.** Pulls rim straight out. Positive in action. For Johnson rims only.

Price, each ..... \$0.75

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## Johnson Golf Course Equipment—Continued



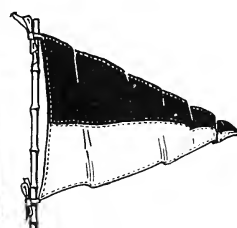
F19



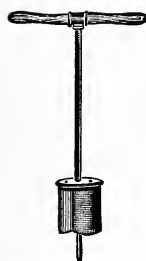
F20 R21



F22



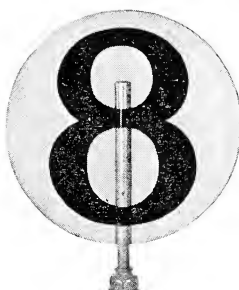
F23



C15



D17



F24



P27-26-25

## Greens Flags

Made of heaviest wool bunting with 3 eyelets and tape for attaching to pole. All flags 12x18 and fit Foulis or Winner Swivels. Felt numbers sewed on one side of flag.

**F19. Flags.** Red with white numbers, 1 to 9 or 10 to 18. Each.....\$0.45

**F19A. Flags.** Orange with black numbers, 1 to 9 or 10 to 18. Each.....\$0.45

**F19W. Flags.** White with red numbers, 1 to 9 or 10 to 18. Each.....\$0.45

**F22. Flags.** Plain flags not numbered, red, white, orange, etc. Each.....\$0.35

**F22A. Flags.** Combination colors, not numbered, red and white, orange and white, red, green and orange (Shrine) or any combination of colors. Colors up and down or across or diagonal. Ea. \$0.45

**F23. Flags.** Triangle shaped, red and white, blue and white, orange and white, etc. Each.....\$0.45

We can promptly furnish any size or colored flag desired.

## Steel Hole Cutter

C15—Improved style, with point for centering and device for ejecting earth and sod after cutting clean hole. Cutter is made of steel. Each.....\$6.00

## Practice Green Discs

Metal discs, painted orange with black numbers 1 to 18. A two-foot iron shaft is strongly fastened to disc.

D17—Round, small size, for putting courses. Each.....\$0.85

## Greens-spotter

F24—Saves time, congestion, confusion. Disc 20 inches in diameter, numbered black on orange. Set on iron staff 15 ft. high, visible at 400 yards. Indispensable on all courses—particularly useful on public or fee courses. Marker heads only, sets of 9 or 18.....\$50 and \$90  
Staff, per foot, on request.

## Bamboo Flag Poles

P25—Bamboo Poles, with spikes. Each.....\$0.80

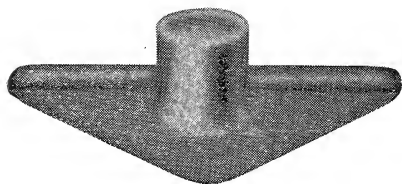
P26—Bamboo Poles, ferrule in bottom. Each.....\$0.65

P27—Bamboo Poles, without spikes or ferrules. Each.....\$0.25

Special quotation in lots of 9 and 18.

*Orders shipped same day as received*

## Par-Tee

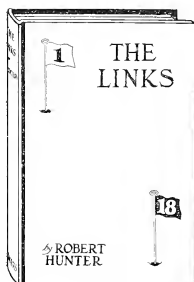


The first and only scientifically designed golf tee (made of pure red rubber) constructed upon **Mechanical Principles**, whereby and because of the rocker action by which **The Tee Turns Over** as soon as the club comes into contact with the ball, permitting the club to follow through without the least resistance.

Price, each .....\$ .25  
Doz. .... 2.00

## Golf Books

### THE LINKS—By Robert Hunter



This is one of the latest contributions to Golf Architecture and contains numerous new ideas on the layout and construction of Golf Courses.

THE LINKS has 163 pages with 48 pages of illustrations showing some of the outstanding Golf Architecture of world famous Courses.  
Price, each .....\$4.00

### Golf Architecture in America—By George C. Thomas, Jr.

This is another late book on the layout and construction of Golf Courses and contains many illustrations and layout plans of the foremost courses in the Old Country and in America.

Price, each .....\$5.00

### Turf for Golf Courses—By C. B. Piper & R. A. Oakley

This book is one of the best, in fact, the only book dealing with the care and maintenance of Golf Courses published at the present time.

TURF FOR GOLF COURSES goes into the details of various turf seeds and their care as well as other maintenance problems.

Price, each .....\$2.50

### The A. B. C. of Turf Culture—By O. J. Noer

This book, we believe, to be the very best on turf culture and fertilization. It goes very thoroughly into the subject of fertilization and is very plain and to the point.

Price, each .....\$3.00



## The Sturdie Tee

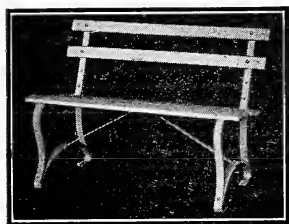
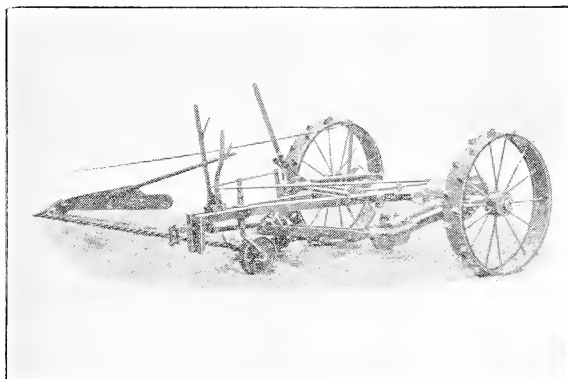
This tee has been designed to give the utmost in service. It is sturdily built and can be used repeatedly. It is easily pushed into the turf and yet will provide a steady support for the ball at the height you like best. Packed 1000 per case either in red or yellow.

Price per 1000 .....\$2.50  
Quantity prices upon request.

## Thomas Rough Mower

This mower is built for high speed tractor work. Has a 6 foot bar and will cut 3 acres per hour. Operated by man on tractor. Attached or detached instantly. Hyatt roller bearings. Two speed sickle.

Price,  
F. O. B. Chicago.....\$150.00

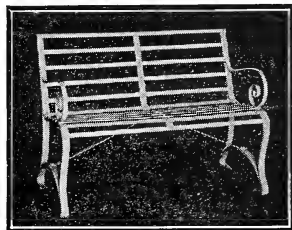


### Tee Benches

The Autocrat. A strong, iron frame bench with wooden slats painted green. Made in three sizes.

769, 4 foot .....	\$3.55
773, 5 foot .....	4.00
774, 6 foot .....	4.20

(f. o. b. Chicago)



The Estate. An all-steel settee with arm rests. Made in single and also 4 and 5 foot sizes.

767, single .....	\$6.50
765, 4 foot .....	6.75
766, 5 foot .....	8.15

(f. o. b. Chicago)



### Original California Benches

The concrete ends are exactly uniform in size, appearance and relatively great strength. They are light in color, smooth and all corners and edges neatly rounded. They are thoroughly reinforced with a steel frame.

The wooden parts in this bench are made from clear California redwood.

**CRATING CHARGE \$1.50 PER BENCH  
EXTRA FOR FREIGHT SHIPMENTS**

Length, 5 feet over all.....	\$12.50
Length, 6 feet over all.....	13.75
Length, 7 feet over all.....	15.00

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